

Sierra Vista Fry Boulevard West End Corridor Study

2-6-2017



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Acknowledgements

The J2 Engineering & Environmental Design Team would like to acknowledge the following City Council members and City Staff members who contributed to the MPO-05; Fry Boulevard, West End Corridor Study. Special thanks are in order to Dan Coxworth, Administrator of the Sierra Vista Metropolitan Planning Organization (MPO).

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Additionally, the input of the residents, business owners, stakeholders, and Sierra Vista West End Commission members has been invaluable in guiding this project.

Thank you very much!

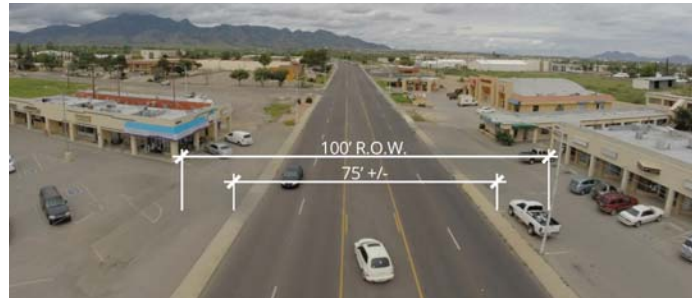


Executive Summary

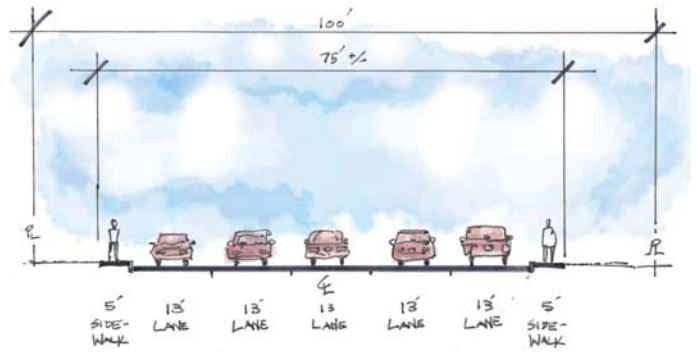
The Fry Boulevard West End Corridor Study (The Project) – Fry Boulevard between Buffalo Soldier Trail (BST) and 7th Street, is a corridor revitalization project that originated from the Sierra Vista City Council's strategic objective to "Update and implement a plan to beautify public infrastructure that increases walkability and bike-ability on Fry Boulevard and North Garden Avenue."

The Project will ultimately encompass the revitalization of Fry Boulevard between BST and 7th Street with improvements that will enhance economic development through reinvestment by businesses, property owners, and future private development. The primary objective of The Project is to showcase Fry Boulevard's West End as an economically vibrant "Front Door" to Sierra Vista that promotes the City and the thoroughfare as a destination environment, attracting new businesses and visitors and enhancing the lives of Sierra Vista residents as put forth in the *Vista 2030: Sierra Vista General Plan*.

As it stands today, the existing framework of Fry Boulevard's West End is not an efficient use of city-owned right of way, with several areas being unused and unproductive. To increase the effectiveness of Fry Boulevard and the economic vibrancy of the West End, this report includes multi-modal transportation and streetscape recommendations based upon stakeholder, public, City Council, City Staff, Sierra Vista Metropolitan Planning Organization (SVMPO), and



Fry Boulevard showing city ROW and roadway.



Existing Fry Boulevard section.

Design Team input. In addition, an understanding of community values, history, branding and marketing potential, and future development scenarios has been utilized throughout the Project process. This study also includes placemaking elements, urban design analysis, a streetscape preliminary alignment plan, opinion of probable costs, and strategies for successful project implementation.



Project Study Area

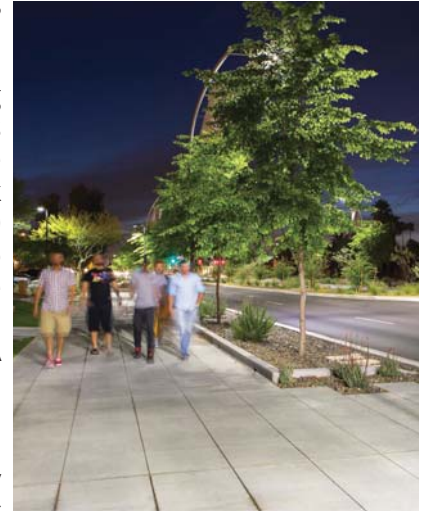


Executive Summary

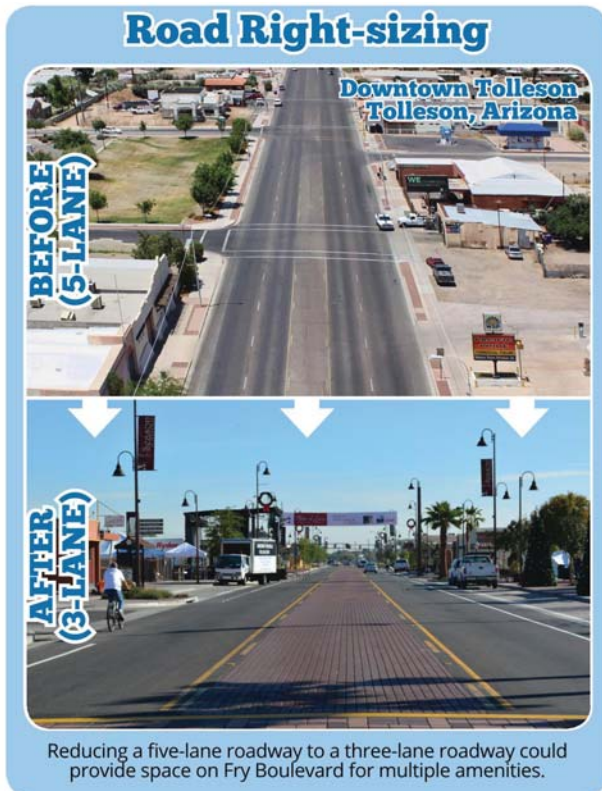
Proposed Project: The Design Team has worked with City Staff to identify a first-stage design and construction project that will set the precedent for the City's long-term vision for Fry Boulevard's West End. Although the planning aspect of this report spans the entire one mile from BST to 7th Street, the Design Team and City Staff recognized that a cost-effective and functional first-stage project could serve as the genesis for this revitalization. The recommended first-stage project runs from Garden Ave. east to Fab Ave. (see Project Study Area, page 3 and First-Phase Project, page 5). The Project runs approximately 0.18 miles including the Garden Ave. intersection.

The framework for the project improvements consists of utilizing the 100-foot wide road right-of-way efficiently to implement a more balanced, multi-modal Fry Boulevard corridor that is safe for vehicles, bicycle riders, and pedestrians. A traffic study was completed as part of the Project which demonstrates that the existing 5 lanes are not being fully utilized in terms of vehicular traffic volume. The traffic analysis looked at the possibility of a

lane reduction along Fry Boulevard from Garden Ave. to 7th Street. This narrowing of the roadway was analyzed during the a.m. and p.m. peak hours to year 2040 and was found to provide acceptable levels of service and traffic operation. A lane reduction, often referred to as "road right-sizing" has been utilized by many communities to better balance transportation modes and to economically stimulate a streetscape or district corridor.



Shared-Use Paths are pedestrian thoroughfares wide enough to support a variety of users.



The proposed first-stage project consists of reducing the existing 5 lanes to 3 lanes (counting the median turn lane), which would provide room for a variety of amenities, aesthetics, and placemaking opportunities that will help to energize the Fry Boulevard Corridor (see Typical Conceptual Section, page 5). The existing narrow sidewalks will be expanded into 10-foot wide shared-use paths, providing space to efficiently support both bicyclists and pedestrians. Additionally, an 11-foot wide water-harvesting swale will redirect street stormwater into the landscape zone, helping to reduce strain on the local drainage infrastructure during storm events while providing deep natural watering to street trees. The water-harvesting swale will provide a buffer separating pedestrians and bike riders from vehicular traffic, while trees and understory plantings will shade and cool users of the shared-use path. Providing a buffer space between vehicular traffic and pedestrians/bicyclists greatly improves the safety and comfort for those walking and bicycling.

The proposed improvements will create a safer, more pedestrian-friendly multi-modal environment while providing room for the many amenities that will develop the Fry Boulevard corridor into a unique



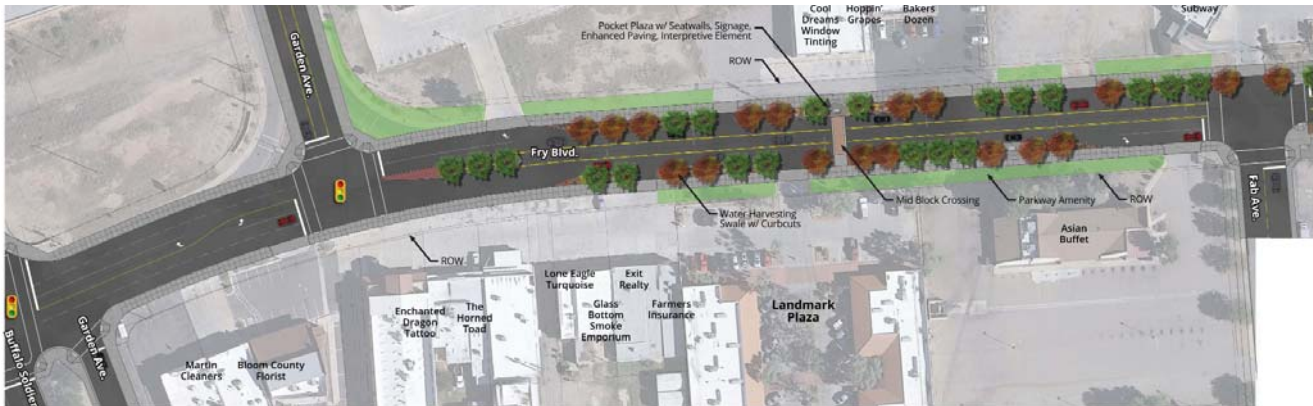
Executive Summary

destination environment with a true sense of place. Overall, Fry Boulevard will function as an efficient 3-lane roadway with additional right-turn lanes where required. The 3-lane roadway will also serve to shorten crosswalk lengths, which will increase pedestrian safety and increase walk-ability along the streetscape.

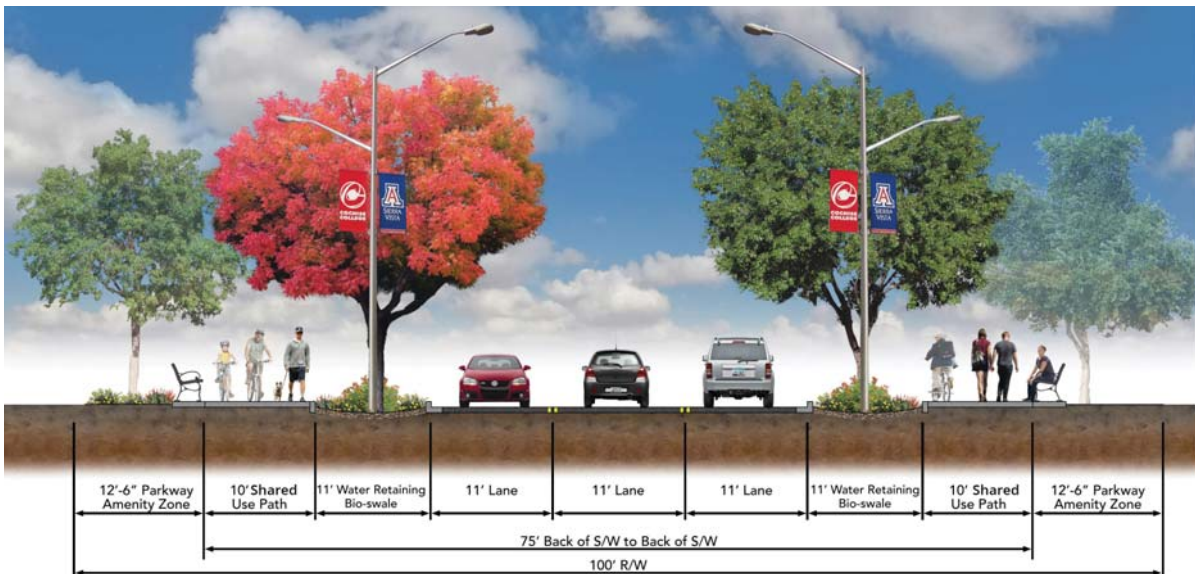
The proposed first-stage project includes: wider shared-use paths (sidewalks), new energy-efficient LED roadway and pedestrian lighting, new roadway paving, light pole accent banners, pedestrian paving, street trees and landscaping, a mid-block pedestrian crossing, automated drip irrigation system, street furnishings (benches, tables, chairs and litter receptacles), bike racks, locations for future artwork

and interpretive elements, new curb and gutter, and water hookups for special events. In addition, there will now be room for pedestrian plazas and small pocket parks.

The estimated construction cost for this **first-stage project from Garden Avenue to Fab Avenue is \$1.5 million** which includes a 20% contingency. Engineering design for this first-stage project is not included in this number and generally runs approximately 10% of construction costs. The estimated construction cost for the remainder of the project from **Fab Avenue to 7th Street (Segments 2 through 5) is approximately \$3.5 million** which includes a 20% contingency.



First-Phase Project - Garden Ave. to Fab Ave.



Typical Conceptual Section



Introduction & Project Background

The City of Sierra Vista lies in southwest Cochise County, Arizona. Sierra Vista is approximately 14 miles from the U.S./Mexico border, 60 miles southeast of Tucson, Arizona, and 160 miles southeast of Phoenix, Arizona. Fry Boulevard, a minor arterial roadway, runs west to east through the city and merges into State Route 90 to the east of the project area. Nearby attractions and municipalities include Kartchner Caverns State Park, Benson, Bisbee, Fort Huachuca, Huachuca City, Sonoita-Elgin wine country, Tombstone, and the San Pedro Riparian National Conservation Area. As of the Census 2010, the population of the City of Sierra Vista was 43,888.

In the summer of 2015, the Design Team was selected to provide planning and conceptual design services for potential improvements to Fry Boulevard in Sierra Vista's West End. The Project is known as the ***Fry Boulevard West End Corridor Study***. Fry Boulevard is a major commercial urban thoroughfare in Sierra Vista running west and east from the former Main Gate of Fort Huachuca at Buffalo Soldier Trail to State Route 90. The Project is in the City's West End, the oldest area of town where businesses along the road are small and mostly locally owned. Additionally, the Project is in the City's redevelopment area and opportunities are being studied to improve economic development

and reinvestment by business and property owners allowing this section of road to be more pedestrian friendly.

The Fry Boulevard West End Corridor Study has identified multi-modal transportation and streetscape design options, green infrastructure improvements, and programmatic strategies to improve the corridor with a particular focus on how transportation and streetscape strategies impact placemaking and economic growth. The focus of the Project is in the area between Buffalo Soldier Trail and 7th Street.

2016 Fry Boulevard Traffic Analysis: A traffic analysis, dated April 2016, was completed by the Design Team to document existing and future traffic conditions and to provide recommendations for use as a foundation for determining the potential of Fry Boulevard from Buffalo Soldier Trail to 7th Street (See MPO-05 Fry Boulevard West End Corridor Traffic Analysis – 7th Street to Buffalo Soldier Trail).

Although there are continuous sidewalks abutting Fry Boulevard, the majority of the pedestrian amenities are not ADA (American with Disabilities Act) compliant. Additionally, bike and transit facilities are not currently provided along the corridor.



Existing Conditions Map



Introduction & Project Background

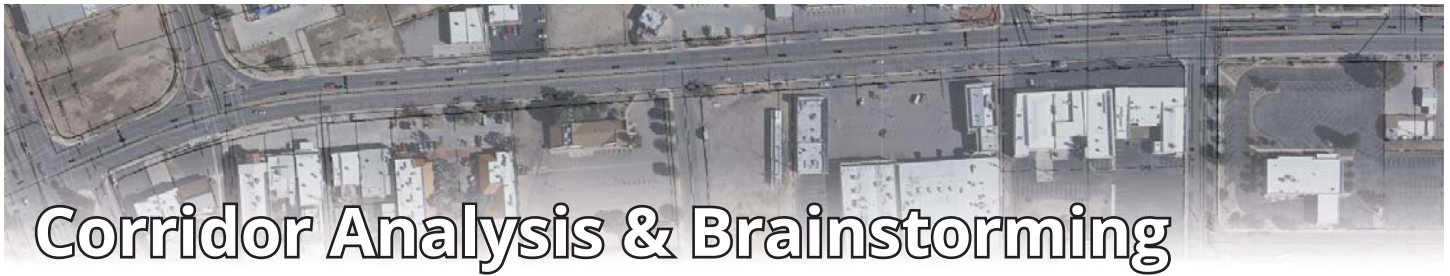
The traffic analysis looked at the possibility of a lane reduction along Fry Boulevard from Buffalo Soldier Trail to 7th Street. This potential narrowing of the roadway was analyzed during the a.m. and p.m. peak hours to year 2040 and was found to provide acceptable levels of service and traffic operation along Fry Boulevard in a lane reduction scenario.

The analysis also recommended incorporating multi-modal enhancements - including pedestrian, bicycle, transit, and parking improvements, in order to support the goals of the Vista 2030 Sierra Vista General Plan, City of Sierra Vista SAFE Bicycle and Pedestrian Routes Plan, and Sierra Vista Transportation Efficiency Study.

In order to improve safety, enhance economic development opportunities, and achieve an improved multi-modal balance of vehicular, pedestrian, bicycle, and mass transit traffic, the Design Team proposed a lane reduction from the existing 5-lane scenario (counting middle turn lane) to a 3-lane scenario for the Fry Boulevard Corridor between BST and Fab Avenue.

The Opportunity: Due in large part to the rerouting of State Route 90 away from Fry Boulevard in the 1970's and the recent shift of Fort Huachuca's main gate entrance northward to the Van Deman Gate, the existing Fry Boulevard corridor has fairly low vehicular traffic volume for a 5-lane arterial roadway. The traffic study determined that 8,775 Average Daily Trips (ADT) occur just east of Garden Avenue and 13,704 ADT occur just west of 6th Street. This provides an opportunity to reduce a single traffic lane in each direction in order to develop a more balanced, multi-modal Fry Boulevard corridor that is safe for vehicles, bicycles, and pedestrians - while still allowing for efficient movement of vehicular traffic. In many communities throughout Arizona and the United States, this approach has produced dynamic positive results in terms of growing economic opportunities, beautification, safety improvements, placemaking, low-impact development/green infrastructure improvements, and overall community health and wellness. There is excellent opportunity for the Sierra Vista community to achieve similar results with a revitalization of the Fry Boulevard corridor in the West End.





Corridor Analysis & Brainstorming

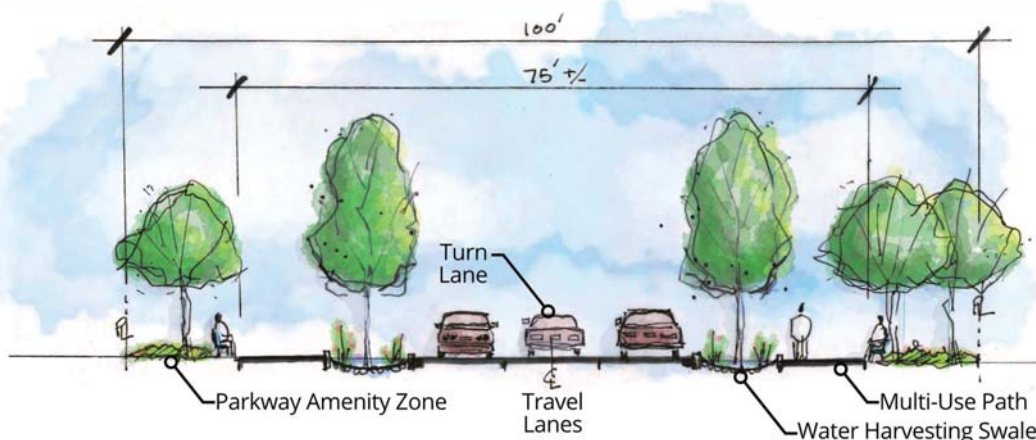
The Design Team began the Project by conducting several site visits and looking at the strengths and opportunities that Sierra Vista has to offer. With the connection to Fort Huachuca and the proximity to other local tourist attractions, Sierra Vista—and the Fry Boulevard West End Corridor—is a prime location to attract tourism dollars and activate new businesses and private development. The Project corridor provides an outstanding opportunity to become a community centerpiece for Sierra Vista residents in a revitalized live/work/play atmosphere. The community of Sierra Vista, business stakeholders and property owners were engaged in this analysis and community brainstorming phase and many embraced the need for change, which is exceptionally valuable and is unique compared to many other communities. In the case of the Fry Boulevard project area, positive change has the potential to significantly promote economic growth resulting in the City of Sierra Vista building a strong foundation to for a unique corridor destination in the West End.

The Design Team began gathering existing data, analyzing Fry Blvd., and evaluating how the project area currently interacts with the larger context of Sierra Vista. An important element of pedestrian access was determining what amenities could be accessed within a 1/4 to 1/2 mile walk from the project limits. The Design Team looked at existing and proposed recreation

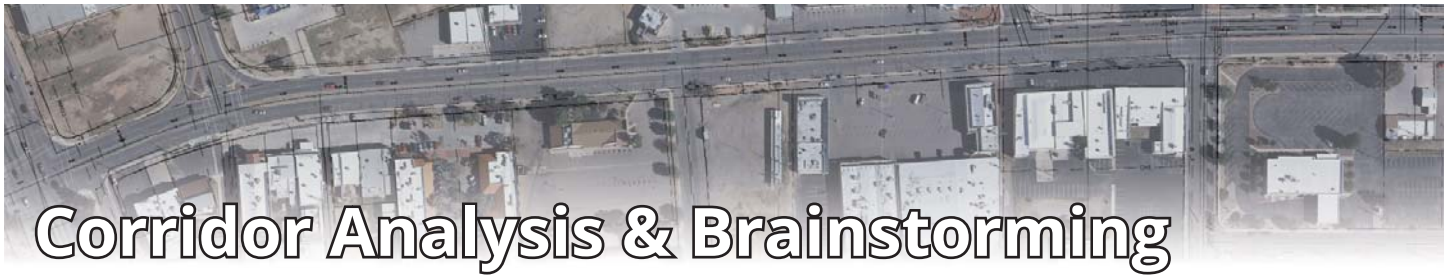
amenities, school facilities, bus stops and routes, and bicycle amenities that connect to the Fry Boulevard Corridor. It was determined that several neighborhoods, park and open space elements, and schools are within a comfortable ½-mile walk from the Fry Corridor (see Site Context Map, Exhibit A). This analysis identified a lack of “destinations” and a cohesive “sense of place” along the corridor with no significant existing character. The project area is heavily vehicle-centric with narrow sidewalks, minimal shade and street trees, and a lack of pedestrian and bicycle amenities and facilities; the streetscape is simply not comfortable for pedestrians or bicycles. The current reality is that the West End vicinity does not offer the private development community and/or local entrepreneurs a solid reason to invest in the project area. In addition, many young West End families shop and play in other communities. Several vacant businesses and lots within the West End also add to some frustration for local residents and stakeholders. There is also a perception that Sierra Vista is “just a retirement community” that lacks culture, arts, and music.

To further define major factors affecting the corridor, the Design Team developed a Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis (see page 9) based on input from business stakeholders, property owners, public meeting attendees, and input from past projects. The

Conceptual Section A - Parkway Amenity



- Functions within existing 75' roadway/sidewalk zone without disturbing adjacent property parking layouts.
- 10' ± Multi-use path supports pedestrian and bicycle activities.
- Includes 10' water harvesting swales which act as planting buffers between multi-use path and vehicular traffic.
- The parkway amenity zone can harvest stormwater runoff while providing additional space for community activities where feasible.



Corridor Analysis & Brainstorming

Strengths

- Fry Blvd is the entry to Sierra Vista; the existing condition is a call for action
- Business stakeholders are eager to be successful and embrace a change
- Connection to Fort Huachuca
- Ramsey Canyon Preserve / Hummingbird Capital
- Tourism Triangle (Sonoita-Wine Country, Kartchner Caverns, Bisbee, Tombstone)
- Cycling Activities
- Farmers Market
- Mountains / Scenery / Weather
- Great Retirement Community
- A good family environment
- Excellent Sense of Community

Weaknesses

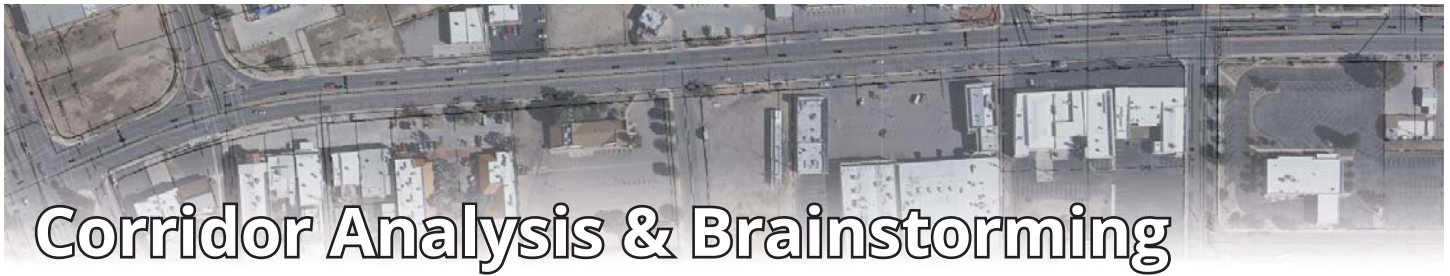
- Dependence on Fort Huachuca (need for Economic Diversification)
- Perception as just a “retirement community”
- Vacant structures along Fry
- Challenges with funding infrastructure improvement
- Lack of culture, arts, music
- Lack of walk-ability and not bike friendly
- Lack of character along Fry Boulevard
- Young Sierra Vista families shop and play in other communities

Opportunities

- Increase retail development
- Restaurant opportunities
- Increase entertainment options
- Opportunity for businesses to attract young professionals
- Attract more tourism dollars: heads in beds, biking, birding
- Attract manufacturing and tech businesses, defense
- Attract visitors with festivals and special events
- Potential for mixed-use development along Fry in the future

Threats

- Adjacent communities – destination dollars
- Resistance to change
- Lack of infrastructure improvement
- Fort Huachuca: Lack of Economic Diversification
- Project Cost



Corridor Analysis & Brainstorming

SWOT revealed several key factors detailing how the community sees Sierra Vista growing in the next decade. The Design Team also evaluated the existing Fry Boulevard roadway section, existing businesses, park and public amenities, existing vehicular traffic and pedestrian circulation routes, and designated flood plains within the Project area (see Project Area Map, Exhibit B).

The analysis and brainstorming provided direction for the Design Team to develop a conceptual framework that will enhance the economic, health, safety, and placemaking possibilities of the project area. This input and brainstorming resulted in three potential roadway sections that were developed for the purpose of design investigation and to facilitate public input (see Exhibits G, H, I, and J).

Concept A – “Parkway Amenity” entailed reducing the existing 5 lanes of traffic to 3, narrowing of lanes, adding shared-use paths, incorporating Low Impact Development (LID) practices such as water-harvesting swales, and utilizing unused right of way as a parkway amenity zone where applicable.

Concept B – “Cycle Track” reduced the 5 lanes to 3 and narrowed the lanes, expanded the existing sidewalk while implementing water-harvesting swales, provided park amenity zones, and proposed a separated “cycle track” that would physically separate vehicles from bicyclists with a raised curb. This scenario was unpopular due to excess space being taken by the cycle track.

Concept C – “Five Lane Parkway” entailed keeping all 5 existing travel lanes, adding a bike lane, expanding the sidewalk, and implementing water-harvesting swales. To maintain the existing 5 lanes, this scenario would expend the entire 100' right of way, eliminating some business access and parking that currently resides in the City right-of-way. As a result this scenario was not well received.

Concept A – “Parkway Amenity” was overwhelmingly the preferred option when presented to stakeholders and City Staff.

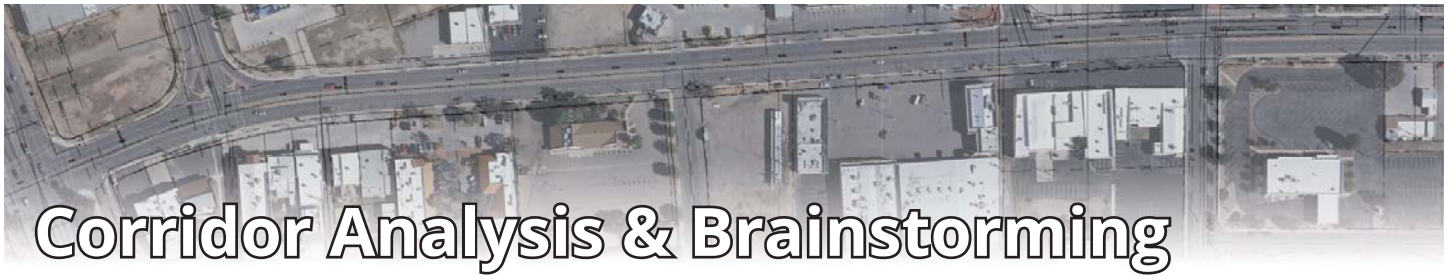
The Design Team also proposed streetscape elements that would create a unique sense of place in the West End. The incorporation of “complete street” principles was specifically stated as necessary in the Sierra Vista 2030 General Plan, and these elements will be incorporated throughout the proposed improvements along Fry Boulevard. The amenities and elements proposed for the Fry Boulevard conceptual framework were developed with an eye toward the natural beauty of the Huachuca Mountains, the military history and southwest culture of the area, and ways that Sierra Vista’s Extraordinary Skies and Uncommon Ground could be reflected along the corridor. The Design Team produced conceptual imagery, photos, and renderings that would serve as inspiration for the corridor improvements. The overall proposed design concept for the corridor was titled “Mountain Rain Garden” reflecting the mountain views and parkway design with its drought-tolerant but lush water harvesting swales boasting hummingbird attracting plants (see Exhibits K and L). The key design elements proposed for the Project Improvements included:

- Pedestrian Paving - the primary 10' wide pedestrian paving will be concrete. This wide pathway provides both bicycle and pedestrian activity, called a “shared-use path” along with seating, bike racks, and litter receptacles. This allows bicycle riders the ability to ride on the path in a much safer environment than on-street bike lanes.

- Benches & Seat Walls (Seatwalls are an optional item to be evaluated during final design) – These elements will be located in areas of high activity or at decision points along the path to frame space and provide opportunities to gather and socialize. The seat wall materials would reflect the stones of the Huachuca Mountains to present a dynamic appearance.



Stone benches



Corridor Analysis & Brainstorming

- Water Harvesting Swales 11' wide planted swales (1' deep) will be implemented along the streetscape to accommodate roadway and sidewalk stormwater, which will provide deep watering of plants and trees.



- Tables & Chairs (Social Seating) - located in areas of high commercial activity or adjacent restaurants. The objective is to encourage pedestrians to interact with each other, to linger and support local businesses, define a unique sense of place, and promote a sense of community.

- Bike Racks – custom bike rack designs can mirror the themes presented in the 2015 Branding Study. The ability to have distinctive elements helps to develop a unique theme and sense of place.



Conceptual Bike Racks from 2015 Branding Study

- Street Trees and Low Water Use Landscape - Street trees will be selected based on their ability to survive in the West End environment, provide abundant shade, and attract the hallmark hummingbird. The shrubs and accents will be sight visibility restriction-compatible, low maintenance, hardy plants with visual interest. The vegetation would be designed so that very minimal water use would be needed, particularly long-term.

- Light Poles will continue the theme that has been set by previous Sierra Vista projects. Roadway and pedestrian light poles will be integrated using energy-efficient LED fixtures to create a safe, welcoming environment. Accent banners will be installed on the roadway poles to enhance the visual identity of Fry Boulevard.



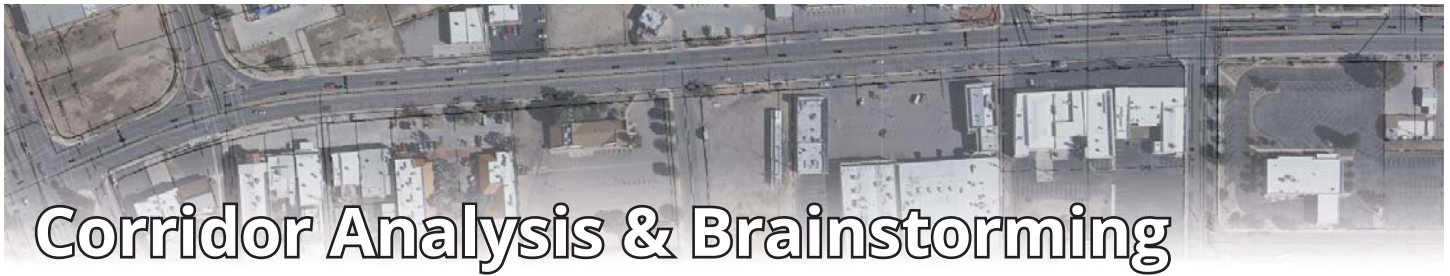
- Directional Wayfinding Signage (future element) Wayfinding Elements could be strategically located throughout the corridor to direct visitors to city attractions and facilities. These potential directional elements will utilize similar materials and architecture of existing design styles.

- Art Elements (future element) – One aspect that can be a unique unifying element is public artwork. Although the public art itself is not part of this estimate, the City will be able to procure future artwork for the base pedestals, which would be part of the project and could serve as seatwalls until art is in place. Conduit will be stubbed to the base pedestals for future potential uplighting of future art. There are numerous ways to implement future art work, including community art, local schools, or a request for artist proposals.

- Utility Infrastructure for Festivals – There will be several areas where 4-plex outlets will be provided for music/stage performance zones. There will also be several "locking hose-bib water bollard" locations for potable water hookups, also for special events.



Public Art in Tolleson, Arizona



Mountain biker riding a trail during the Foray at the Fort Mountain Bike Race at Fort Huachuca.

In summary, a successful destination is more than just the sum of its parts. The functional purpose of these recommended elements is to activate the West End, but at the end of the day they are simply pieces connected by a larger framework. The real success of the Project relies on the growing momentum of stakeholders, the sustained support by the population at large, and the continued leadership from the civic core of Sierra Vista.

This report has benefitted greatly by all three of these vital components. The Corridor Analysis & Brainstorming phase allowed the Design Team to work with stakeholders to produce a foundation and design concept that could serve to revitalize the Fry Boulevard West End Corridor. The renewed Fry Boulevard is envisioned as a destination environment for the community and region that incorporates complete street, green infrastructure, and low-impact development (LID) principles for long-term economic and community sustainability, while providing a more pedestrian-friendly, multi-modal transportation environment.



Expanded rendered plan view of conceptual Proposed First Stage Project.

February 6, 2017

Fry Boulevard - West End Corridor Study





Stakeholder Involvement & Outreach

A key component to developing a successful, workable, and functional Project was to engage the business owners, property owners, West End Commission, residents, City and MPO staff, and other area stakeholders to identify the needs and vision for the future. The project schedule included two stakeholder meetings exclusively for businesses, discussions with individual stakeholders, collaboration with the City, County, and MPO, and a public meeting for all interested individuals to learn about the proposed concepts and have their voices be heard. A local project hotline was also set up by the Project Team in addition to the website operated by the SVMPO (www.svmpos.org).

To reach out to businesses in the West End corridor project area, mailers were sent to property and business owners, followed by personal visits to deliver information to encourage participation. This involvement provided input that assisted in the conceptual design, function, and amenities along Fry Boulevard's West End. A follow-on meeting exclusively for businesses provided an opportunity for additional input and comments on refined Design Team plan concepts. This meeting yielded a much larger interest as well as demonstrated that businesses were beginning to coalesce and work toward a common vision and goal for the Project. To that end, many businesses were present at the public meeting where they shared their thoughts with the general public about their desires to help the West End redevelop and revitalize into a destination for now and the future. One business owner put it well when he said, *"The West End is where Sierra Vista began, but it's not where it ends"*.

These open discussions and interactive sessions with businesses, property owners and residents of the West End and Sierra Vista guided the direction, focus, and conceptual design for the project recommendations and resulted in a stronger overall plan. The public has expressed a clear need for more walkable streets, a safer community, aesthetic improvements, community interaction and enhancing positive property access along Fry Boulevard's West End. Familiar themes of family, community pride, history, and economic opportunity were reiterated several times by many different voices at each of the meetings. The proposals put forth in this document reflect Sierra Vista's goals in a realistic and cost effective way.

Meeting Milestones

November 17, 2015

City Council Corridor Study Presentation

January 21, 2016

Individual Business Outreach

February 1, 2016

Business Roundtable Discussion #1

March 1, 2016

Individual Business Outreach

March 14, 2016

Business Roundtable Discussion #2

April 5, 2016

Public Meeting Presentation

July 26, 2016

City Council Corridor Study Presentation





Implementation Plan

Fry Boulevard is the heart of the West End—Sierra Vista's oldest community. Despite this strong historical connection and the devotion of residents and business owners, the Fry Boulevard West End Corridor has seen decline since the rerouting of SR 90 in the 1970s. Implementing a priority revitalization project to begin the transformation of Fry Boulevard from a vehicular-focused State highway to a dynamic destination corridor is crucial at this time in order to enhance the economic, health, safety & wellness, multi-modal, and placemaking potential of Sierra Vista's West End. The Project evaluated the one-mile area of Fry Boulevard between Buffalo Soldier Trail and 7th Street. However, implementation of this corridor revitalization should be accomplished in cost-effective steps. The City, MPO, and Design Team have proposed a first-stage "priority project" as the first step.

The first-stage priority project is proposed for Fry Boulevard from Garden Avenue to Fab Avenue (approximately 0.18 miles of improvements). The Project would consist of narrowing the existing five-lane roadway east of Garden Avenue to a three-lane configuration with one lane in each direction. All existing turn lanes at major intersections will remain, and the lane conditions between Buffalo Soldier Trail and Garden Avenue would remain as a five-lane scenario. The number of driveways will be strategically reduced to enhance pedestrian safety and to ensure proper ingress and egress to every business. No medians will be designed that obstruct traffic flow in any way. Shared-use paths will increase the safety and health of residents, while landscaping and shade trees will adhere to the personality of Sierra Vista and be planted in water-harvesting swales that reduce the strain on drainage infrastructure. The installation of site furnishings, amenities, and street light banners will match the tone set by the 2015 Branding Study and will further accentuate the character of the Fry Boulevard Corridor. These solutions all adhere to the *Vista 2030: Sierra Vista General Plan*, promoting Sierra Vista as "an attractive, vibrant, and inviting place to live, work and visit."

The project will be programmed in a focused and deliberate manner. The Design Team will coordinate with city staff at each iteration of the project with

special attention being paid to the maintenance and growth of the project. Low water use plantings and innovative installation technology will cut down the strain on infrastructure and result in a final product that is easily and efficiently maintained.

This first-stage priority project from Garden Avenue to Fab Avenue will be a powerful signal from the City that the West End is a valuable asset to Sierra Vista and will announce to City residents, Fort Huachuca, Arizona in-state visitors, and out-of-state tourists that the Fry Boulevard Corridor is an outstanding location – very much open for dining, hotels, festivals, commercial activity and night life.

The construction cost estimate for the first-stage project is approximately \$1.5 million which includes a 20% contingency. This first-stage project could be designed in approximately 6 months from commencement and would take approximately 6 months to construct.

The remainder of the project, from Fab Avenue east to 7th Street, can be designed and completed in the future at one time - or may be broken up into smaller, more economically manageable portions. **This eastern area of the corridor, titled "Segments Two through Five: Fab Avenue to 7th Street" has a construction cost estimate of approximately \$3.5 million which includes a 20% contingency.**

The Design Team recommends that the **First-Stage Priority Project: Garden Avenue to Fab Avenue** be implemented by the City of Sierra Vista as soon as possible to take full advantage of the current momentum and prepare for the opportunity for future development.



Sierra Vista West End banners installed in July, 2016.



Proposed First-Stage Project - Garden Avenue to Fab Avenue (page 1 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
GENERAL ITEMS					
1	MOBILIZATION	LS	1	\$44,000.00	\$ 44,000.00
2	CONSTRUCTION WATER SUPPLY	LS	1	\$9,500.00	\$ 9,500.00
3	TRAFFIC CONTROL (ALLOWANCE)	LS	1	\$48,000.00	\$ 48,000.00
4	SWPPP (ALLOWANCE)	LS	1	\$16,000.00	\$ 16,000.00
5	POTHOLING (ALLOWANCE)	LS	1	\$8,500.00	\$ 8,500.00
6	PUBLIC OUTREACH (ALLOWANCE)	LS	1	\$12,500.00	\$ 12,500.00
7	CONSTRUCTION SURVEY, LAYOUT, AS-BUILTS	LS	1	\$17,000.00	\$ 17,000.00
8	FIELD OFFICE	LS	1	\$22,000.00	\$ 22,000.00
9	MISCELLANEOUS (SWEEPING, DUST CONTROL, PERMITTING)	LS	1	\$22,000.00	\$ 22,000.00
10	BOND	LS	1	\$30,000.00	\$ 30,000.00
11	INSURANCE	LS	1	\$36,000.00	\$ 36,000.00
12	RIGHT-OF-WAY PURCHASE (NONE AT THIS TIME)	SF	0	\$14.00	\$ -
REMOVALS					
13	REMOVE AC PAVEMENT	SY	5,841	\$3.30	\$ 19,275.30
14	REMOVE & SALVAGE MISC BENCHES AND SITE AMENITIES (DELIVER TO CITY YARD)	LS	1	\$4,000.00	\$ 4,000.00
15	REMOVE CONCRETE CURB & GUTTER	LF	1,565	\$3.00	\$ 4,695.00
16	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & PAVERS	SF	7,800	\$2.00	\$ 15,600.00
17	REMOVE TRAFFIC SIGNS (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
18	REMOVE & DELIVER STREET LIGHTS TO CITY FIELD OPERATIONS YARD	LS	1	\$10,000.00	\$ 10,000.00
19	REMOVE, SALVAGE, AND RELOCATE FIRE HYDRANT	EA	1	\$2,500.00	\$ 2,500.00
20	REMOVE MISC WALLS & HARDSCAPE (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
21	REMOVE AC PAVEMENT AT DRIVEWAY TIE-IN AREAS (TCE)	LS	1	\$2,500.00	\$ 2,500.00
22	REMOVE TREES	LS	1	\$4,000.00	\$ 4,000.00
EARTHWORK AND ROADWAY PAVING					
23	ROADWAY SUBGRADE PREPARATION	SY	3,565	\$3.00	\$ 10,695.00
24	6" AGGREGATE BASE COURSE	TON	1,082	\$20.00	\$ 21,640.00
25	2.5" AC PAVEMENT SURFACE COURSE (D-1/2")	TON	501	\$75.00	\$ 37,575.00
26	3" AC PAVEMENT BASE COURSE (C-3/4")	TON	601	\$75.00	\$ 45,075.00
27	TACK COAT (0.08 GAL/SY)	TON	2	\$625.00	\$ 1,250.00
28	SLURRY SEAL APPLICATION AT EAST APPROACH AREA (20 LB/SY) 1/2" ACFC (400 FOOT APPROACH)	LS	1	\$3,000.00	\$ 3,000.00
29	VERTICAL CURB & GUTTER	LF	1,930	\$15.00	\$ 28,950.00
30	ADJUST VALVE FRAMES & COVER TO GRADE (MISC)	LS	1	\$5,000.00	\$ 5,000.00
31	ADJUST MANHOLE FRAMES & COVER TO GRADE (MISC)	LS	1	\$5,000.00	\$ 5,000.00
32	SURVEY MARKER TYPE A	EA	2	\$800.00	\$ 1,600.00
33	SIDEWALK RAMP	EA	2	\$1,200.00	\$ 2,400.00
TRAFFIC SIGNALS					
34	TRAFFIC SIGNAL AT GARDEN AVENUE	LS	1	\$160,000.00	\$ 160,000.00
35	HAWK MID-BLOCK CROSSING (INCLUDING ELECTRICAL SERVICE AND ALL EQUIPMENT)	LS	1	\$95,000.00	\$ 95,000.00
SIGNING & MARKING					
36	PAINT STRIPING & MARKING	LS	1	\$11,000.00	\$ 11,000.00
UTILITIES & STORMDRAIN					
37	WATER SERVICE & METER - 1 1/2" FOR FESTIVAL WATER BOLLARDS, INCLUDING BACKFLOW PREVENTER	EA	1	\$5,500.00	\$ 5,500.00
38	WATER SERVICE RUNNING LINE TO ALLEYS	LS	1	\$10,000.00	\$ 10,000.00
39	MISC. WATER LINE / SEWER LINE RELOCATIONS	LS	1	\$10,000.00	\$ 10,000.00
40	REMOVE & REPLACE EXISTING CATCH BASINS	LS	1	\$8,500.00	\$ 8,500.00
HARDSCAPE					
41	CONCRETE SIDEWALK - STD GRAY (BROOM FINISH 4" THICK ON GRADE)	SF	14,933	\$4.00	\$ 59,732.00
42	CROSSWALK (ASPHALT)	SF	550	\$2.00	\$ 1,100.00
43	MEDIAN LANE (ASPHALT)	SF	8,620	\$2.00	\$ 17,240.00



Preliminary Cost Estimate

Proposed First-Stage Project - Garden Avenue to Fab Avenue (page 2 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
44	DRIVEWAY CONCRETE AT SIDEWALKS (BROOM FINISH 8" THICK ON GRADE)	SF	1,877	\$9.00	\$ 16,893.00
HARDSCAPE RENOVATION OF EXISTING CONDITIONS					
45	MISC ADJACENT HARDSCAPE REHABILITATION - FINISH AND COLOR TO MATCH EXISTING	LS	1	\$5,000.00	\$ 5,000.00
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
SITE AMENITIES					
46	LITTER RECEPTACLE	EA	8	\$1,900.00	\$ 15,200.00
47	SEATWALL W/ TILE	LF	80	\$0.00	\$ -
48	BIKE RACK	EA	4	\$1,200.00	\$ 4,800.00
49	ACCENT TABLES	EA	3	\$1,250.00	\$ 3,750.00
50	CHAIRS	EA	9	\$2,500.00	\$ 22,500.00
51	BENCHES	EA	4	\$2,800.00	\$ 11,200.00
52	WATER BOLLARD (POTABLE WATER HOSE BIB FOR SPECIAL EVENTS)	EA	4	\$2,000.00	\$ 8,000.00
53	BUS STOP STRUCTURE W/ CITY LOGO, BENCH, LITTER RECEPTACLE	EA	1	\$0.00	\$ -
LANDSCAPE					
54	TREE (36" BOX)	EA	35	\$515.00	\$ 18,025.00
55	SHRUBS AND ACCENTS (5 GAL)	EA	125	\$22.00	\$ 2,750.00
56	SHRUB (1 GAL)	EA	200	\$12.00	\$ 2,400.00
57	MISC LANDSCAPE RESTORATION (AT PRIVATE PROPERTY EDGES)	LS	1	\$6,500.00	\$ 6,500.00
58	PARKWAY AMENITY LANDSCAPE (INCLUDING TREES, SHRUBS, DG)	SF	12,705	\$2.25	\$ 28,586.25
59	1" TO 3" ANGULAR RIPRAP FOR WATER HARVESTING SWALES	SF	9,604	\$1.65	\$ 15,846.60
LANDSCAPE IRRIGATION					
60	IRRIGATION REMOVAL & RESTORATION	LS	1	\$5,000.00	\$ 5,000.00
61	IRRIGATION CONTROLLER 'A' 24 STATION W/ PEDESTAL	LS	1	\$8,500.00	\$ 8,500.00
62	1 1/2" METER AND REDUCED PRESSURE BACKFLOW PREVENTER W/ ENCLOSURE	EA	1	\$5,000.00	\$ 5,000.00
63	PARKWAY AMENITY DRIP IRRIGATION SYSTEM	SF	12,705	\$1.00	\$ 12,705.00
64	LANDSCAPE IRRIGATION SYSTEM	LS	1	\$18,000.00	\$ 18,000.00
STREET & PEDESTRIAN LIGHTING / ELECTRICAL / ACCENT LIGHTING					
65	ROADWAY LIGHT POLES WITH LOWER HEIGHT PEDESTRIAN LIGHT (LED FIXTURE)	EA	12	\$3,300.00	\$ 39,600.00
66	PEDESTRIAN LIGHT POLE (LED FIXTURE)	EA	12	\$2,400.00	\$ 28,800.00
67	METER / ELECTRICAL SERVICE AND UTILITY COMPANY COSTS FOR AUXILIARY POWER	EA	1	\$9,000.00	\$ 9,000.00
68	TRENCH, CONDUIT, AND WIRE FOR ROADWAY / PEDESTRIAN LIGHTING	LS	1	\$25,000.00	\$ 25,000.00
69	AUXILIARY TREE LIGHTING OUTLETS	EA	42	\$0.00	\$ -
70	AUXILIARY 4-PLEX OUTLETS FOR FESTIVAL USE	EA	2	\$1,200.00	\$ 2,400.00
71	TRENCH, CONDUIT, AND WIRE FOR ELECTRICAL OUTLET SYSTEM	LS	1	\$21,000.00	\$ 21,000.00
72	BANNERS W/ SPRING-LOADED BRACKETS FOR ROADWAY LIGHT POLES (DUAL BANNERS TO MATCH MLK PKWY)	EA	12	\$400.00	\$ 4,800.00
SIGNAGE /WAYFINDING ELEMENTS					
73	SCULPTURE BASE FOR FUTURE INTERPRETIVE ART	EA	2	\$0.00	\$ -
74	WAYFINDING ELEMENTS	EA	2	\$0.00	\$ -
Subtotal				\$	1,213,583.15
CONTINGENCY (20%)				\$	242,716.63
SUBTOTAL WITH CONTINGENCIES				\$	1,456,299.78
SEGMENT ONE PROJECT:				\$	1,456,299.78
GARDEN AVENUE TO FAB AVENUE					



Segment 2 - Fab Avenue to Carmichael Avenue (page 1 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
GENERAL ITEMS					
1	MOBILIZATION	LS	1	\$40,000.00	\$ 40,000.00
2	CONSTRUCTION WATER SUPPLY	LS	1	\$10,000.00	\$ 10,000.00
3	TRAFFIC CONTROL (ALLOWANCE)	LS	1	\$44,000.00	\$ 44,000.00
4	SWPPP (ALLOWANCE)	LS	1	\$16,000.00	\$ 16,000.00
5	POTHOLING (ALLOWANCE)	LS	1	\$8,500.00	\$ 8,500.00
6	PUBLIC OUTREACH (ALLOWANCE)	LS	1	\$12,500.00	\$ 12,500.00
7	CONSTRUCTION SURVEY, LAYOUT, AS-BUILTS	LS	1	\$17,000.00	\$ 17,000.00
8	FIELD OFFICE	LS	1	\$22,000.00	\$ 22,000.00
9	MISCELLANEOUS (SWEEPING, DUST CONTROL, PERMITTING)	LS	1	\$22,000.00	\$ 22,000.00
10	BOND	LS	1	\$30,000.00	\$ 30,000.00
11	INSURANCE	LS	1	\$36,000.00	\$ 36,000.00
12	RIGHT-OF-WAY PURCHASE (NONE AT THIS TIME)	SF	0	\$14.00	\$ -
REMOVALS					
13	REMOVE AC PAVEMENT	SY	6,730	\$3.30	\$ 22,209.00
14	REMOVE & SALVAGE MISC BENCHES AND SITE AMENITIES (DELIVER TO CITY YARD)	LS	1	\$4,000.00	\$ 4,000.00
15	REMOVE CONCRETE CURB & GUTTER	LF	1,855	\$3.00	\$ 5,565.00
16	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & PAVERS	SF	9,190	\$2.00	\$ 18,380.00
17	REMOVE TRAFFIC SIGNS (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
18	REMOVE & DELIVER STREET LIGHTS TO CITY FIELD OPERATIONS YARD	LS	1	\$10,000.00	\$ 10,000.00
19	REMOVE, SALVAGE, AND RELOCATE FIRE HYDRANT	EA	1	\$2,500.00	\$ 2,500.00
20	REMOVE MISC WALLS & HARDSCAPE (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
21	REMOVE AC PAVEMENT AT DRIVEWAY TIE-IN AREAS (TCE)	LS	1	\$2,500.00	\$ 2,500.00
22	REMOVE TREES	LS	1	\$4,000.00	\$ 4,000.00
EARTHWORK AND ROADWAY PAVING					
23	ROADWAY SUBGRADE PREPARATION	SY	4,220	\$3.00	\$ 12,660.00
24	6" AGGREGATE BASE COURSE	TON	1,282	\$20.00	\$ 25,640.00
25	2.5" AC PAVEMENT SURFACE COURSE (D-1/2")	TON	293	\$75.00	\$ 21,975.00
26	3" AC PAVEMENT BASE COURSE (C-3/4")	TON	712	\$75.00	\$ 53,400.00
27	TACK COAT (0.08 GAL/SY)	TON	2	\$625.00	\$ 1,250.00
28	SLURRY SEAL APPLICATION AT EAST APPROACH AREA (20 LB/SY) 1/2" ACFC (400 FOOT APPROACH)	LS	1	\$3,000.00	\$ 3,000.00
29	VERTICAL CURB & GUTTER	LF	1,895	\$15.00	\$ 28,425.00
30	ADJUST VALVE FRAMES & COVER TO GRADE	LS	1	\$5,000.00	\$ 5,000.00
31	ADJUST MANHOLE FRAMES & COVER TO GRADE	LS	1	\$5,000.00	\$ 5,000.00
32	SURVEY MARKER TYPE A	EA	3	\$800.00	\$ 2,400.00
33	SIDEWALK RAMP	EA	8	\$1,200.00	\$ 9,600.00
SIGNING & MARKING					
34	PAINT STRIPING & MARKING	LS	1	\$10,000.00	\$ 10,000.00
UTILITIES & STORMDRAIN					
35	WATER SERVICE & METER - 1 1/2" FOR FESTIVAL WATER BOLLARDS, INCLUDING BACKFLOW PREVENTER	EA	1	\$5,500.00	\$ 5,500.00
36	WATER SERVICE RUNNING LINE TO ALLEYS	LS	1	\$10,000.00	\$ 10,000.00
37	MISC. WATER LINE / SEWER LINE RELOCATIONS	LS	1	\$10,000.00	\$ 10,000.00
38	REMOVE & REPLACE EXISTING CATCH BASINS	LS	1	\$8,500.00	\$ 8,500.00
HARDSCAPE					
39	CONCRETE SIDEWALK - STD GRAY (BROOM FINISH 4" THICK ON GRADE)	SF	14,760	\$4.00	\$ 59,040.00
40	CROSSWALK (ASPHALT)	SF	930	\$2.00	\$ 1,860.00
41	MEDIAN LANE (ASPHALT)	SF	12,220	\$2.00	\$ 24,440.00
42	DRIVEWAY CONCRETE AT SIDEWALKS (BROOM FINISH 8" THICK ON GRADE)	SF	2,471	\$9.00	\$ 22,239.00
HARDSCAPE RENOVATION OF EXISTING CONDITIONS					
43	MISC ADJACENT HARDSCAPE REHABILITATION - FINISH AND COLOR TO MATCH EXISTING	LS	1	\$5,000.00	\$ 5,000.00



Segment 2 - Fab Avenue to Carmichael Avenue (page 2 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
SITE AMENITIES					
44	LITTER RECEPTACLE	EA	6	\$1,900.00	\$ 11,400.00
45	SEATWALL W/ TILE	LF	80	\$0.00	\$ -
46	BIKE RACK	EA	4	\$1,200.00	\$ 4,800.00
47	ACCENT TABLES	EA	3	\$1,250.00	\$ 3,750.00
48	CHAIRS	EA	9	\$2,500.00	\$ 22,500.00
49	BENCHES	EA	6	\$2,800.00	\$ 16,800.00
50	WATER BOLLARD (POTABLE WATER HOSE BIB FOR SPECIAL EVENTS)	EA	4	\$2,000.00	\$ 8,000.00
51	BUS STOP STRUCTURE W/ CITY LOGO, BENCH, LITTER RECEPTACLE	EA	1	\$0.00	\$ -
LANDSCAPE					
52	TREE (36" BOX)	EA	38	\$515.00	\$ 19,570.00
53	SHRUBS AND ACCENTS (5 GAL)	EA	120	\$22.00	\$ 2,640.00
54	SHRUB (1 GAL)	EA	185	\$12.00	\$ 2,220.00
55	MISC LANDSCAPE RESTORATION (AT PRIVATE PROPERTY EDGES)	LS	1	\$6,500.00	\$ 6,500.00
56	PARKWAY AMENITY LANDSCAPE (INCLUDING TREES, SHRUBS, DG)	SF	11,866	\$2.25	\$ 26,698.50
57	1" TO 3" ANGULAR RIPRAP FOR WATER HARVESTING SWALES	SF	11,775	\$1.65	\$ 19,428.75
LANDSCAPE IRRIGATION					
58	IRRIGATION REMOVAL & RESTORATION	LS	1	\$5,000.00	\$ 5,000.00
59	IRRIGATION CONTROLLER 'A' 24 STATION W/ PEDESTAL	LS	0	\$8,500.00	\$ -
60	1 1/2" METER AND REDUCED PRESSURE BACKFLOW PREVENTER W/ ENCLOSURE	EA	0	\$5,000.00	\$ -
61	PARKWAY AMENITY DRIP IRRIGATION SYSTEM	SF	11,866	\$1.00	\$ 11,866.00
62	LANDSCAPE IRRIGATION SYSTEM	LS	1	\$18,000.00	\$ 18,000.00
STREET & PEDESTRIAN LIGHTING / ELECTRICAL / ACCENT LIGHTING					
63	ROADWAY LIGHT POLES WITH LOWER HEIGHT PEDESTRIAN LIGHT (LED FIXTURE)	EA	12	\$3,300.00	\$ 39,600.00
64	PEDESTRIAN LIGHT POLE (LED FIXTURE)	EA	12	\$2,400.00	\$ 28,800.00
65	METER / ELECTRICAL SERVICE AND UTILITY COMPANY COSTS FOR AUXILIARY POWER	EA	1	\$9,000.00	\$ 9,000.00
66	TRENCH, CONDUIT, AND WIRE FOR ROADWAY / PEDESTRIAN LIGHTING	LS	1	\$25,000.00	\$ 25,000.00
67	AUXILIARY TREE LIGHTING OUTLETS	EA	42	\$0.00	\$ -
68	AUXILIARY 4-PLEX OUTLETS FOR FESTIVAL USE	EA	2	\$1,200.00	\$ 2,400.00
74	TRENCH, CONDUIT, AND WIRE FOR ELECTRICAL OUTLET SYSTEM	LS	1	\$21,000.00	\$ 21,000.00
75	BANNERS W/ SPRING-LOADED BRACKETS FOR ROADWAY LIGHT POLES (DUAL BANNERS TO MATCH MLK PKWY)	EA	12	\$400.00	\$ 4,800.00
SIGNAGE /WAYFINDING ELEMENTS					
76	SCULPTURE BASE FOR FUTURE INTERPRETIVE ART	EA	1	\$0.00	\$ -
77	WAYFINDING ELEMENTS	EA	1	\$0.00	\$ -
Subtotal				\$	965,856.25
CONTINGENCY (20%)				\$	193,171.25
SUBTOTAL WITH CONTINGENCIES				\$	1,159,027.50
SEGMENT TWO PROJECT:				\$	1,159,027.50
FAB AVENUE TO CARMICHAEL AVENUE					



Segment 3 - Carmichael Avenue to 2nd Street (page 1 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
GENERAL ITEMS					
1	MOBILIZATION	LS	1	\$43,000.00	\$ 43,000.00
2	CONSTRUCTION WATER SUPPLY	LS	1	\$9,500.00	\$ 9,500.00
3	TRAFFIC CONTROL (ALLOWANCE)	LS	1	\$48,000.00	\$ 48,000.00
4	SWPPP (ALLOWANCE)	LS	1	\$16,000.00	\$ 16,000.00
5	POTHOLING (ALLOWANCE)	LS	1	\$8,500.00	\$ 8,500.00
6	PUBLIC OUTREACH (ALLOWANCE)	LS	1	\$12,500.00	\$ 12,500.00
7	CONSTRUCTION SURVEY, LAYOUT, AS-BUILTS	LS	1	\$17,000.00	\$ 17,000.00
8	FIELD OFFICE	LS	1	\$22,000.00	\$ 22,000.00
9	MISCELLANEOUS (SWEEPING, DUST CONTROL, PERMITTING)	LS	1	\$22,000.00	\$ 22,000.00
10	BOND	LS	1	\$30,000.00	\$ 30,000.00
11	INSURANCE	LS	1	\$36,000.00	\$ 36,000.00
12	RIGHT-OF-WAY PURCHASE (NONE AT THIS TIME)	SF	0	\$14.00	\$ -
REMOVALS					
13	REMOVE AC PAVEMENT	SY	7,790	\$3.30	\$ 25,707.00
14	REMOVE & SALVAGE MISC BENCHES AND SITE AMENITIES (DELIVER TO CITY YARD)	LS	1	\$4,000.00	\$ 4,000.00
15	REMOVE CONCRETE CURB & GUTTER	LF	2,085	\$3.00	\$ 6,255.00
16	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & PAVERS	SF	10,440	\$2.00	\$ 20,880.00
17	REMOVE TRAFFIC SIGNS (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
18	REMOVE & DELIVER STREET LIGHTS TO CITY FIELD OPERATIONS YARD	LS	1	\$10,000.00	\$ 10,000.00
19	REMOVE, SALVAGE, AND RELOCATE FIRE HYDRANT	EA	1	\$2,500.00	\$ 2,500.00
20	REMOVE MISC WALLS & HARDSCAPE (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
21	REMOVE AC PAVEMENT AT DRIVEWAY TIE-IN AREAS (TCE)	LS	1	\$2,500.00	\$ 2,500.00
22	REMOVE TREES	LS	1	\$4,000.00	\$ 4,000.00
EARTHWORK AND ROADWAY PAVING					
23	ROADWAY SUBGRADE PREPARATION	SY	4,536	\$3.00	\$ 13,608.00
24	6" AGGREGATE BASE COURSE	TON	1,378	\$20.00	\$ 27,560.00
25	2.5" AC PAVEMENT SURFACE COURSE (D-1/2")	TON	638	\$75.00	\$ 47,850.00
26	3" AC PAVEMENT BASE COURSE (C-3/4")	TON	765	\$75.00	\$ 57,375.00
27	TACK COAT (0.08 GAL/SY)	TON	2	\$625.00	\$ 1,250.00
28	SLURRY SEAL APPLICATION AT EAST APPROACH AREA (20 LB/SY) 1/2" ACFC (400 FOOT APPROACH)	LS	1	\$3,000.00	\$ 3,000.00
29	VERTICAL CURB & GUTTER	LF	3,110	\$15.00	\$ 46,650.00
30	ADJUST VALVE FRAMES & COVER TO GRADE	LS	1	\$5,000.00	\$ 5,000.00
31	ADJUST MANHOLE FRAMES & COVER TO GRADE	LS	1	\$5,000.00	\$ 5,000.00
32	SURVEY MARKER TYPE A	EA	4	\$800.00	\$ 3,200.00
33	SIDEWALK RAMP	EA	19	\$1,200.00	\$ 22,800.00
SIGNING & MARKING					
34	PAINT STRIPING & MARKING	LS	1	\$10,000.00	\$ 10,000.00
UTILITIES & STORMDRAIN					
35	WATER SERVICE & METER - 1 1/2" FOR FESTIVAL WATER BOLLARDS, INCLUDING BACKFLOW PREVENTER	EA	1	\$5,500.00	\$ 5,500.00
36	WATER SERVICE RUNNING LINE TO ALLEYS	LS	1	\$10,000.00	\$ 10,000.00
37	MISC. WATER LINE / SEWER LINE RELOCATIONS	LS	1	\$10,000.00	\$ 10,000.00
38	REMOVE & REPLACE EXISTING CATCH BASINS	LS	1	\$8,500.00	\$ 8,500.00
HARDSCAPE					
39	CONCRETE SIDEWALK - STD GRAY (BROOM FINISH 4" THICK ON GRADE)	SF	18,549	\$4.00	\$ 74,196.00
40	CROSSWALK (ASPHALT)	SF	3,370	\$2.00	\$ 6,740.00
41	MEDIAN LANE (ASPHALT)	SF	11,500	\$2.00	\$ 23,000.00
42	DRIVEWAY CONCRETE AT SIDEWALKS (BROOM FINISH 8" THICK ON GRADE)	SF	1,990	\$9.00	\$ 17,910.00
HARDSCAPE RENOVATION OF EXISTING CONDITIONS					
43	MISC ADJACENT HARDSCAPE REHABILITATION - FINISH AND COLOR TO MATCH EXISTING	LS	1	\$5,000.00	\$ 5,000.00



Segment 3 - Carmichael Avenue to 2nd Street (page 2 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
SITE AMENITIES					
44	LITTER RECEPTACLE	EA	5	\$1,900.00	\$ 9,500.00
45	SEATWALL W/ TILE	LF	80	\$0.00	\$ -
46	BIKE RACK	EA	3	\$1,200.00	\$ 3,600.00
47	ACCENT TABLES	EA	2	\$1,250.00	\$ 2,500.00
48	CHAIRS	EA	6	\$2,500.00	\$ 15,000.00
49	BENCHES	EA	2	\$2,800.00	\$ 5,600.00
50	WATER BOLLARD (POTABLE WATER HOSE BIB FOR SPECIAL EVENTS)	EA	4	\$2,000.00	\$ 8,000.00
51	BUS STOP STRUCTURE W/ CITY LOGO, BENCH, LITTER RECEPTACLE	EA	1	\$0.00	\$ -
LANDSCAPE					
52	TREE (36" BOX)	EA	55	\$515.00	\$ 28,325.00
53	SHRUBS AND ACCENTS (5 GAL)	EA	175	\$22.00	\$ 3,850.00
54	SHRUB (1 GAL)	EA	225	\$12.00	\$ 2,700.00
55	MISC LANDSCAPE RESTORATION (AT PRIVATE PROPERTY EDGES)	LS	1	\$6,500.00	\$ 6,500.00
56	PARKWAY AMENITY LANDSCAPE (INCLUDING TREES, SHRUBS, DG)	SF	6,762	\$2.25	\$ 15,214.50
57	1" TO 3" ANGULAR RIPRAP FOR WATER HARVESTING SWALES	SF	14,142	\$1.65	\$ 23,334.30
LANDSCAPE IRRIGATION					
58	IRRIGATION REMOVAL & RESTORATION	LS	1	\$5,000.00	\$ 5,000.00
59	IRRIGATION CONTROLLER 'A' 24 STATION W/ PEDESTAL	LS	1	\$8,500.00	\$ 8,500.00
60	1 1/2" METER AND REDUCED PRESSURE BACKFLOW PREVENTER W/ ENCLOSURE	EA	1	\$5,000.00	\$ 5,000.00
61	PARKWAY AMENITY DRIP IRRIGATION SYSTEM	SF	6,762	\$1.00	\$ 6,762.00
62	LANDSCAPE IRRIGATION SYSTEM	LS	1	\$18,000.00	\$ 18,000.00
STREET & PEDESTRIAN LIGHTING / ELECTRICAL / ACCENT LIGHTING					
63	ROADWAY LIGHT POLES WITH LOWER HEIGHT PEDESTRIAN LIGHT (LED FIXTURE)	EA	13	\$3,300.00	\$ 42,900.00
64	PEDESTRIAN LIGHT POLE (LED FIXTURE)	EA	13	\$2,400.00	\$ 31,200.00
65	METER / ELECTRICAL SERVICE AND UTILITY COMPANY COSTS FOR AUXILIARY POWER	EA	1	\$9,000.00	\$ 9,000.00
66	TRENCH, CONDUIT, AND WIRE FOR ROADWAY / PEDESTRIAN LIGHTING	LS	1	\$25,000.00	\$ 25,000.00
67	AUXILIARY TREE LIGHTING OUTLETS	EA	42	\$0.00	\$ -
68	AUXILIARY 4-PLEX OUTLETS FOR FESTIVAL USE	EA	2	\$1,200.00	\$ 2,400.00
69	TRENCH, CONDUIT, AND WIRE FOR ELECTRICAL OUTLET SYSTEM	LS	1	\$21,000.00	\$ 21,000.00
70	BANNERS W/ SPRING-LOADED BRACKETS FOR ROADWAY LIGHT POLES (DUAL BANNERS TO MATCH MLK PKWY)	EA	12	\$400.00	\$ 4,800.00
SIGNAGE /WAYFINDING ELEMENTS					
71	SCULPTURE BASE FOR FUTURE INTERPRETIVE ART	EA	0	\$2,600.00	\$ -
72	WAYFINDING ELEMENTS	EA	0	\$12,000.00	\$ -
Subtotal				\$	1,052,166.80
CONTINGENCY (20%)				\$	210,433.36
SUBTOTAL WITH CONTINGENCIES				\$	1,262,600.16
SEGMENT THREE PROJECT:				\$	1,262,600.16
CARMICHAEL AVENUE TO 2ND STREET					



Segment 4 - 2nd Street to 5th Street (page 1 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
GENERAL ITEMS					
1	MOBILIZATION	LS	1	\$40,000.00	\$ 40,000.00
2	CONSTRUCTION WATER SUPPLY	LS	1	\$9,000.00	\$ 9,000.00
3	TRAFFIC CONTROL (ALLOWANCE)	LS	1	\$42,000.00	\$ 42,000.00
4	SWPPP (ALLOWANCE)	LS	1	\$15,000.00	\$ 15,000.00
5	POTHOLING (ALLOWANCE)	LS	1	\$8,200.00	\$ 8,200.00
6	PUBLIC OUTREACH (ALLOWANCE)	LS	1	\$11,500.00	\$ 11,500.00
7	CONSTRUCTION SURVEY, LAYOUT, AS-BUILTS	LS	1	\$16,000.00	\$ 16,000.00
8	FIELD OFFICE	LS	1	\$22,000.00	\$ 22,000.00
9	MISCELLANEOUS (SWEEPING, DUST CONTROL, PERMITTING)	LS	1	\$20,000.00	\$ 20,000.00
10	BOND	LS	1	\$30,000.00	\$ 30,000.00
11	INSURANCE	LS	1	\$36,000.00	\$ 36,000.00
12	RIGHT-OF-WAY PURCHASE (NONE AT THIS TIME)	SF	0	\$14.00	\$ -
REMOVALS					
13	REMOVE AC PAVEMENT	SY	6,315	\$3.30	\$ 20,839.50
14	REMOVE & SALVAGE MISC BENCHES AND SITE AMENITIES (DELIVER TO CITY YARD)	LS	1	\$4,000.00	\$ 4,000.00
15	REMOVE CONCRETE CURB & GUTTER	LF	1,730	\$3.00	\$ 5,190.00
16	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & PAVERS	SF	8,340	\$2.00	\$ 16,680.00
17	REMOVE TRAFFIC SIGNS (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
18	REMOVE & DELIVER STREET LIGHTS TO CITY FIELD OPERATIONS YARD	LS	1	\$9,000.00	\$ 9,000.00
19	REMOVE, SALVAGE, AND RELOCATE FIRE HYDRANT (AS REQUIRED)	EA	1	\$2,500.00	\$ 2,500.00
20	REMOVE MISC WALLS & HARDSCAPE (MISC REMOVAL)	LS	1	\$2,000.00	\$ 2,000.00
21	REMOVE AC PAVEMENT AT DRIVEWAY TIE-IN AREAS (TCE)	LS	1	\$2,500.00	\$ 2,500.00
22	REMOVE TREES	LS	1	\$4,000.00	\$ 4,000.00
EARTHWORK AND ROADWAY PAVING					
23	ROADWAY SUBGRADE PREPARATION	SY	3,590	\$3.00	\$ 10,770.00
24	6" AGGREGATE BASE COURSE	TON	1,090	\$20.00	\$ 21,800.00
25	2.5" AC PAVEMENT SURFACE COURSE (D-1/2')	TON	505	\$75.00	\$ 37,875.00
26	3" AC PAVEMENT BASE COURSE (C-3/4')	TON	610	\$75.00	\$ 45,750.00
27	TACK COAT (0.08 GAL/SY)	TON	2	\$625.00	\$ 1,250.00
28	SLURRY SEAL APPLICATION AT EAST APPROACH AREA (20 LB/SY) 1/2" ACFC (400 FOOT APPROACH)	LS	1	\$3,000.00	\$ 3,000.00
29	VERTICAL CURB & GUTTER	LF	1,820	\$15.00	\$ 27,300.00
30	ADJUST VALVE FRAMES & COVER TO GRADE	LS	1	\$5,000.00	\$ 5,000.00
31	ADJUST MANHOLE FRAMES & COVER TO GRADE	LS	1	\$5,000.00	\$ 5,000.00
32	SURVEY MARKER TYPE A	EA	3	\$800.00	\$ 2,400.00
33	SIDEWALK RAMP	EA	10	\$1,200.00	\$ 12,000.00
SIGNING & MARKING					
34	PAINT STRIPING & MARKING	LS	1	\$10,000.00	\$ 10,000.00
UTILITIES & STORMDRAIN					
35	WATER SERVICE & METER - 1 1/2" FOR FESTIVAL WATER BOLLARDS, INCLUDING BACKFLOW PREVENTER	EA	1	\$5,500.00	\$ 5,500.00
36	WATER SERVICE RUNNING LINE TO ALLEYS	LS	1	\$10,000.00	\$ 10,000.00
37	MISC. WATER LINE / SEWER LINE RELOCATIONS	LS	1	\$10,000.00	\$ 10,000.00
38	REMOVE & REPLACE EXISTING CATCH BASINS	LS	1	\$8,500.00	\$ 8,500.00
HARDSCAPE					
39	CONCRETE SIDEWALK - STD GRAY (BROOM FINISH 4" THICK ON GRADE)	SF	15,023	\$4.00	\$ 60,092.00
40	CROSSWALK (ASPHALT)	SF	2,000	\$2.00	\$ 4,000.00
41	MEDIAN LANE (ASPHALT)	SF	11,500	\$2.00	\$ 23,000.00
42	DRIVEWAY CONCRETE AT SIDEWALKS (BROOM FINISH 8" THICK ON GRADE)	SF	2,125	\$9.00	\$ 19,125.00
HARDSCAPE RENOVATION OF EXISTING CONDITIONS					
43	MISC ADJACENT HARDSCAPE REHABILITATION - FINISH AND COLOR TO MATCH EXISTING	LS	1	\$5,000.00	\$ 5,000.00



Segment 4 - 2nd Street to 5th Street (page 2 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
SITE AMENITIES					
44	LITTER RECEPTACLE	EA	4	\$1,900.00	\$ 7,600.00
45	SEATWALL W/ TILE	LF	80	\$0.00	\$ -
46	BIKE RACK	EA	2	\$1,200.00	\$ 2,400.00
47	ACCENT TABLES	EA	2	\$1,250.00	\$ 2,500.00
48	CHAIRS	EA	6	\$2,500.00	\$ 15,000.00
49	BENCHES	EA	4	\$2,800.00	\$ 11,200.00
50	WATER BOLLARD (POTABLE WATER HOSE BIB FOR SPECIAL EVENTS)	EA	4	\$2,000.00	\$ 8,000.00
51	BUS STOP STRUCTURE W/ CITY LOGO, BENCH, LITTER RECEPTACLE	EA	1	\$0.00	\$ -
LANDSCAPE					
52	TREE (36" BOX)	EA	47	\$515.00	\$ 24,205.00
53	SHRUBS AND ACCENTS (5 GAL)	EA	150	\$22.00	\$ 3,300.00
54	SHRUB (1 GAL)	EA	225	\$12.00	\$ 2,700.00
55	MISC LANDSCAPE RESTORATION (AT PRIVATE PROPERTY EDGES)	LS	1	\$6,500.00	\$ 6,500.00
56	PARKWAY AMENITY LANDSCAPE (INCLUDING TREES, SHRUBS, DG)	SF	6,315	\$2.25	\$ 14,208.75
57	1" TO 3" ANGULAR RIPRAP FOR WATER HARVESTING SWALES	SF	12,230	\$1.65	\$ 20,179.50
LANDSCAPE IRRIGATION					
58	IRRIGATION REMOVAL & RESTORATION	LS	1	\$5,000.00	\$ 5,000.00
59	IRRIGATION CONTROLLER 'A' 24 STATION W/ PEDESTAL	LS	0	\$8,500.00	\$ -
60	1 1/2" METER AND REDUCED PRESSURE BACKFLOW PREVENTER W/ ENCLOSURE	EA	0	\$5,000.00	\$ -
61	PARKWAY AMENITY DRIP IRRIGATION SYSTEM	SF	6,315	\$1.00	\$ 6,315.00
62	LANDSCAPE IRRIGATION SYSTEM	LS	1	\$18,000.00	\$ 18,000.00
STREET & PEDESTRIAN LIGHTING / ELECTRICAL / ACCENT LIGHTING					
63	ROADWAY LIGHT POLES WITH LOWER HEIGHT PEDESTRIAN LIGHT (LED FIXTURE)	EA	12	\$3,300.00	\$ 39,600.00
64	PEDESTRIAN LIGHT POLE (LED FIXTURE)	EA	12	\$2,400.00	\$ 28,800.00
65	METER / ELECTRICAL SERVICE AND UTILITY COMPANY COSTS FOR AUXILIARY POWER	EA	1	\$9,000.00	\$ 9,000.00
66	TRENCH, CONDUIT, AND WIRE FOR ROADWAY / PEDESTRIAN LIGHTING	LS	1	\$25,000.00	\$ 25,000.00
67	AUXILIARY TREE LIGHTING OUTLETS	EA	42	\$0.00	\$ -
68	AUXILIARY 4-PLEX OUTLETS FOR FESTIVAL USE	EA	2	\$1,200.00	\$ 2,400.00
69	TRENCH, CONDUIT, AND WIRE FOR ELECTRICAL OUTLET SYSTEM	LS	1	\$21,000.00	\$ 21,000.00
70	BANNERS W/ SPRING-LOADED BRACKETS FOR ROADWAY LIGHT POLES (DUAL BANNERS TO MATCH MLK PKWY)	EA	12	\$400.00	\$ 4,800.00
SIGNAGE /WAYFINDING ELEMENTS					
71	SCULPTURE BASE FOR FUTURE INTERPRETIVE ART	EA	0	\$2,600.00	\$ -
72	WAYFINDING ELEMENTS	EA	0	\$12,000.00	\$ -
Subtotal				\$	923,479.75
CONTINGENCY (20%)				\$	184,695.95
SUBTOTAL WITH CONTINGENCIES				\$	1,108,175.70
SEGMENT FOUR PROJECT:				\$	1,108,175.70
2ND STREET TO 5TH STREET					



Preliminary Cost Estimate

Segment 5 - 5th Street to 7th Street (page 2 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
GENERAL ITEMS					
1	MOBILIZATION	LS	0	\$0.00	\$ -
2	CONSTRUCTION WATER SUPPLY	LS	0	\$0.00	\$ -
3	TRAFFIC CONTROL (ALLOWANCE)	LS	0	\$0.00	\$ -
4	SWPPP (ALLOWANCE)	LS	0	\$0.00	\$ -
5	POTHOLING (ALLOWANCE)	LS	0	\$0.00	\$ -
6	PUBLIC OUTREACH (ALLOWANCE)	LS	0	\$0.00	\$ -
7	CONSTRUCTION SURVEY, LAYOUT, AS-BUILTS	LS	0	\$0.00	\$ -
8	FIELD OFFICE	LS	0	\$0.00	\$ -
9	MISCELLANEOUS (SWEEPING, DUST CONTROL, PERMITTING)	LS	0	\$0.00	\$ -
10	BOND	LS	0	\$0.00	\$ -
11	INSURANCE	LS	0	\$0.00	\$ -
12	RIGHT-OF-WAY PURCHASE (NONE AT THIS TIME)	SF	0	\$14.00	\$ -
REMOVALS					
13	REMOVE AC PAVEMENT	SY	6,729	\$0.00	\$ -
14	REMOVE & SALVAGE MISC BENCHES AND SITE AMENITIES (DELIVER TO CITY YARD)	LS	1	\$0.00	\$ -
15	REMOVE CONCRETE CURB & GUTTER	LF	2,145	\$0.00	\$ -
16	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & PAVERS	SF	8,936	\$0.00	\$ -
17	REMOVE TRAFFIC SIGNS (MISC REMOVAL)	LS	1	\$0.00	\$ -
18	REMOVE & DELIVER STREET LIGHTS TO CITY FIELD OPERATIONS YARD	LS	1	\$0.00	\$ -
19	REMOVE, SALVAGE, AND RELOCATE FIRE HYDRANT	EA	1	\$0.00	\$ -
20	REMOVE MISC WALLS & HARDSCAPE (MISC REMOVAL)	LS	1	\$0.00	\$ -
21	REMOVE AC PAVEMENT AT DRIVEWAY TIE-IN AREAS (TCE)	LS	0	\$0.00	\$ -
22	REMOVE TREES	LS	0	\$0.00	\$ -
23	REMOVE CATCH BASINS	LS	0	\$0.00	\$ -
EARTHWORK AND ROADWAY PAVING					
24	ROADWAY SUBGRADE PREPARATION	SY	0	\$3.00	\$ -
25	6" AGGREGATE BASE COURSE	TON	0	\$20.00	\$ -
26	2.5" AC PAVEMENT SURFACE COURSE (D-1/2")	TON	0	\$75.00	\$ -
27	3" AC PAVEMENT BASE COURSE (C-3/4")	TON	0	\$75.00	\$ -
28	TACK COAT (0.08 GAL/SY)	TON	0	\$625.00	\$ -
29	SLURRY SEAL APPLICATION (20 LB/SY) 1/2" ACFC	LS	1	\$7,500.00	\$ 7,500.00
30	VERTICAL CURB & GUTTER	LF	0	\$15.00	\$ -
31	ADJUST VALVE FRAMES & COVER TO GRADE	LS	0	\$5,000.00	\$ -
32	ADJUST MANHOLE FRAMES & COVER TO GRADE	LS	0	\$5,000.00	\$ -
33	SURVEY MARKER TYPE A	EA	0	\$800.00	\$ -
34	SIDEWALK RAMP	EA	0	\$1,200.00	\$ -
SIGNING & MARKING					
35	PAINT STRIPING & MARKING	LS	1	\$7,000.00	\$ 2,500.00
UTILITIES & STORMDRAIN					
36	WATER SERVICE & METER - 1 1/2" FOR FESTIVAL WATER BOLLARDS, INCLUDING BACKFLOW PREVENTER	EA	0	\$5,500.00	\$ -
37	WATER SERVICE RUNNING LINE TO ALLEYS	LS	0	\$10,000.00	\$ -
38	MISC. WATER LINE / SEWER LINE RELOCATIONS	LS	0	\$10,000.00	\$ -
39	REMOVE & REPLACE EXISTING CATCH BASINS	LS	0	\$8,500.00	\$ -
HARDSCAPE					
40	CONCRETE SIDEWALK - STD GRAY (BROOM FINISH 4" THICK ON GRADE)	SF	0	\$4.00	\$ -
41	CROSSWALK (ASPHALT)	SF	0	\$2.00	\$ -
42	MEDIAN LANE (ASPHALT)	SF	0	\$2.00	\$ -
43	DRIVEWAY CONCRETE AT SIDEWALKS (BROOM FINISH 8" THICK ON GRADE)	SF	0	\$9.00	\$ -

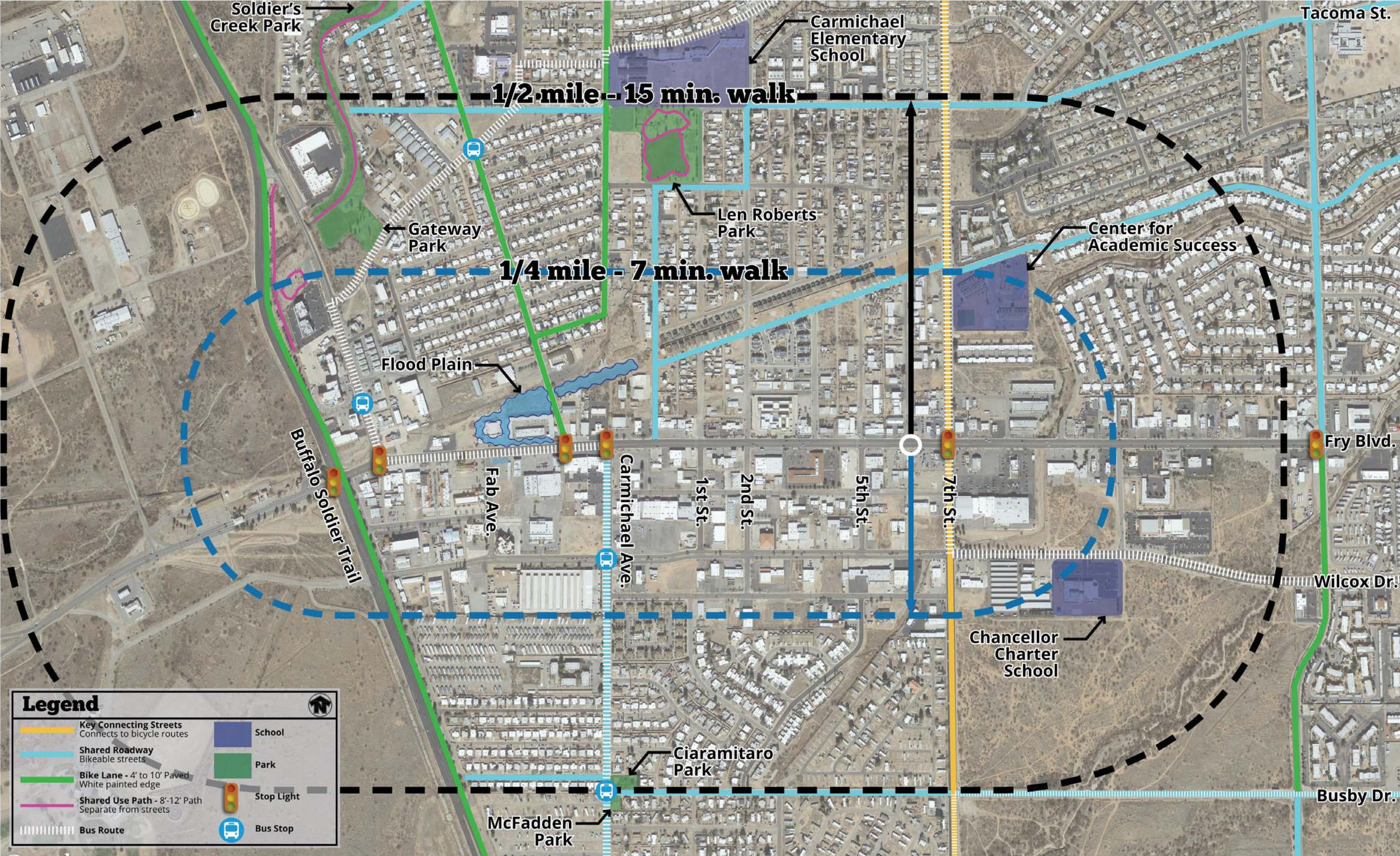


Segment 5 - 5th Street to 7th Street (page 2 of 2)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	EXTENDED AMOUNT
SITE AMENITIES					
45	LITTER RECEPTACLE	EA	0	\$1,900.00	\$ -
46	SEATWALL W/ TILE	LF	0	\$425.00	\$ -
47	BIKE RACK	EA	0	\$1,200.00	\$ -
48	ACCENT TABLES	EA	0	\$1,250.00	\$ -
49	CHAIRS	EA	0	\$2,500.00	\$ -
50	BENCHES	EA	0	\$2,800.00	\$ -
51	WATER BOLLARD (POTABLE WATER HOSE BIB FOR SPECIAL EVENTS)	EA	0	\$2,000.00	\$ -
52	BUS STOP STRUCTURE W/ CITY LOGO, BENCH, LITTER RECEPTACLE	EA	0	\$15,500.00	\$ -
LANDSCAPE					
53	TREE (36" BOX)	EA	0	\$515.00	\$ -
54	SHRUBS AND ACCENTS (5 GAL)	EA	0	\$22.00	\$ -
55	SHRUB (1 GAL)	EA	0	\$12.00	\$ -
56	MISC LANDSCAPE RESTORATION (AT PRIVATE PROPERTY EDGES)	LS	0	\$6,500.00	\$ -
57	PARKWAY AMENITY LANDSCAPE (INCLUDING TREES, SHRUBS, DG)	SF	0	\$2.25	\$ -
58	1" TO 3" ANGULAR RIPRAP FOR WATER HARVESTING SWALES	SF	0	\$1.65	\$ -
LANDSCAPE IRRIGATION					
59	IRRIGATION REMOVAL & RESTORATION	LS	0	\$5,000.00	\$ -
60	IRRIGATION CONTROLLER 'A' 24 STATION W/ PEDESTAL	LS	0	\$8,500.00	\$ -
61	1 1/2" METER AND REDUCED PRESSURE BACKFLOW PREVENTER W/ ENCLOSURE	EA	0	\$4,500.00	\$ -
62	PARKWAY AMENITY DRIP IRRIGATION SYSTEM	SF	0	\$1.00	\$ -
63	LANDSCAPE IRRIGATION SYSTEM	LS	0	\$18,000.00	\$ -
STREET & PEDESTRIAN LIGHTING / ELECTRICAL / ACCENT LIGHTING					
64	ROADWAY LIGHT POLES WITH LOWER HEIGHT PEDESTRIAN LIGHT (LED FIXTURE)	EA	0	\$3,300.00	\$ -
65	PEDESTRIAN LIGHT POLE (LED FIXTURE)	EA	0	\$2,400.00	\$ -
66	METER / ELECTRICAL SERVICE AND UTILITY COMPANY COSTS FOR AUXILIARY POWER	EA	0	\$9,000.00	\$ -
67	TRENCH, CONDUIT, AND WIRE FOR ROADWAY / PEDESTRIAN LIGHTING	LS	0	\$25,000.00	\$ -
68	AUXILIARY TREE LIGHTING OUTLETS	EA	0	\$800.00	\$ -
69	AUXILIARY 4-PLEX OUTLETS FOR FESTIVAL USE	EA	0	\$1,200.00	\$ -
74	TRENCH, CONDUIT, AND WIRE FOR ELECTRICAL OUTLET SYSTEM	LS	0	\$21,000.00	\$ -
75	BANNERS W/ SPRING-LOADED BRACKETS FOR ROADWAY LIGHT POLES (DUAL BANNERS TO MATCH MLK PKWY)	EA	12	\$400.00	\$ 4,800.00
SIGNAGE /WAYFINDING ELEMENTS					
76	SCULPTURE BASE FOR FUTURE INTERPRETIVE ART	EA	0	\$2,600.00	\$ -
77	WAYFINDING ELEMENTS	EA	0	\$12,000.00	\$ -
Subtotal				\$	14,800.00
CONTINGENCY (20%)				\$	2,960.00
SUBTOTAL WITH CONTINGENCIES				\$	17,760.00
SEGMENT FIVE PROJECT:				\$	17,760.00
5TH STREET TO 7TH STREET					

Sierra Vista Fry Boulevard West End Corridor Study

Appendix

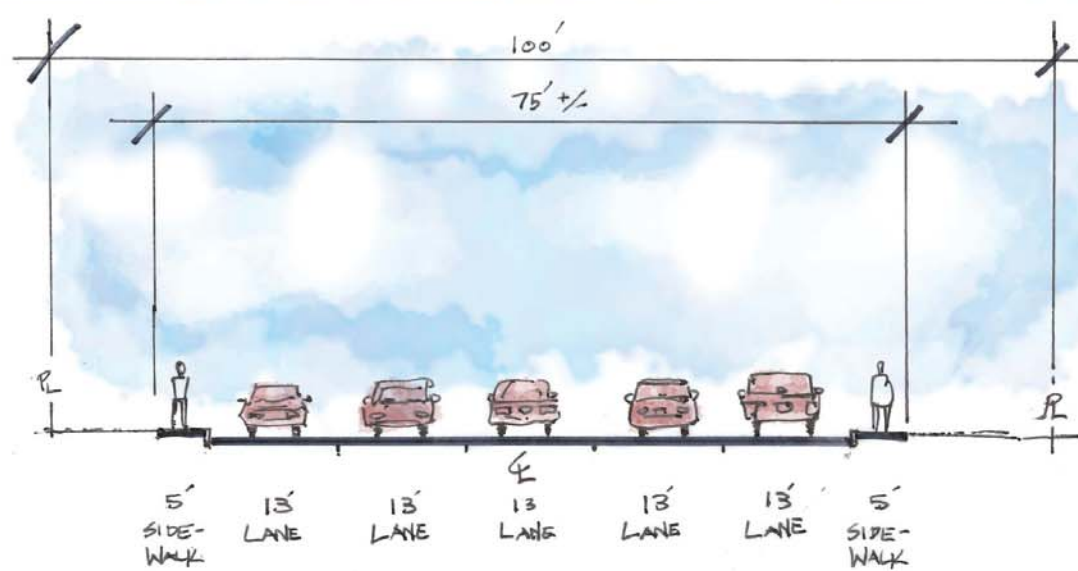


Existing Conditions Map



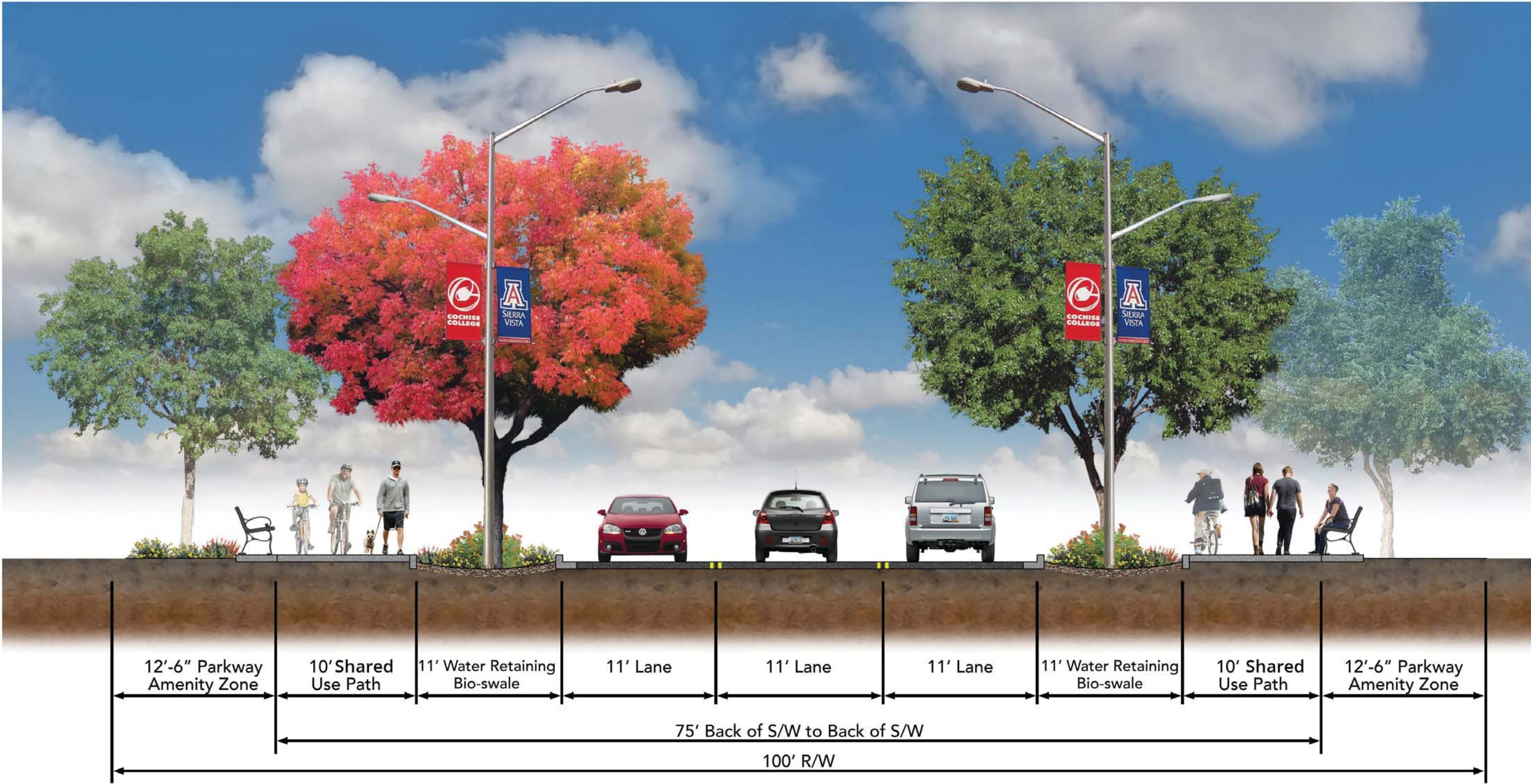
Existing Conditions

- Fry Boulevard currently supports five travel lanes that are 13' wide. For perspective a typical car is 7' wide.
- Existing functioning space is 75' wide from back of sidewalk to back of sidewalk. This includes the five travel lanes and two 5' wide sidewalks.
- The right-of-way owned by Sierra Vista is 100' wide. The additional 25' is being utilized in a variety of ways by property owners along both sides of Fry Boulevard.





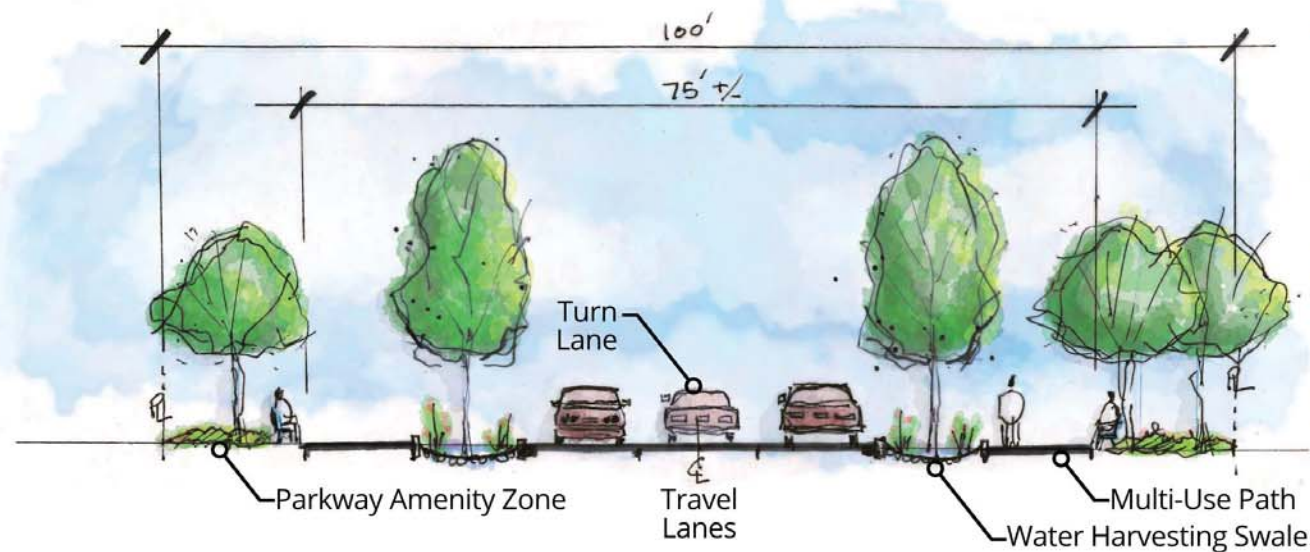




Enlargement Plan within Proposed First Stage Project



Conceptual Section A - Parkway Amenity



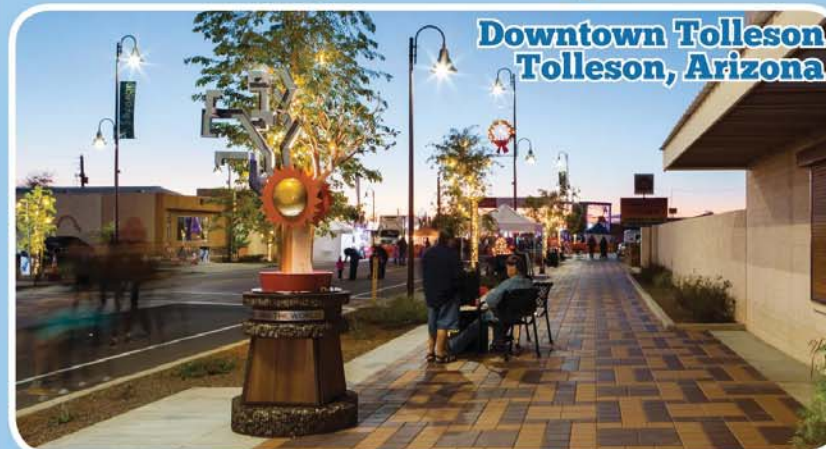
- Functions within existing 75' roadway/sidewalk zone without disturbing adjacent property parking layouts.
- 10' ± Multi-use path supports pedestrian and bicycle activities.
- Includes 10' water harvesting swales which act as planting buffers between multi-use path and vehicular traffic.
- The parkway amenity zone can harvest stormwater runoff while providing additional space for community activities where feasible.

Multi-Use Path



Multi-Use Paths are pedestrian thoroughfares that are wide enough to support pedestrians, runners, wheelchairs, parents with strollers, bicyclists, and scooters.

Parkway Amenity Zone



An amenity zone is an additional area within the city right-of-way that provides a variety of features for public use. Amenities can take the form of plazas, seating, water features, wayfinding elements, monumentation, public art, shade structures, parklets, and economic incubators.



Existing Conditions



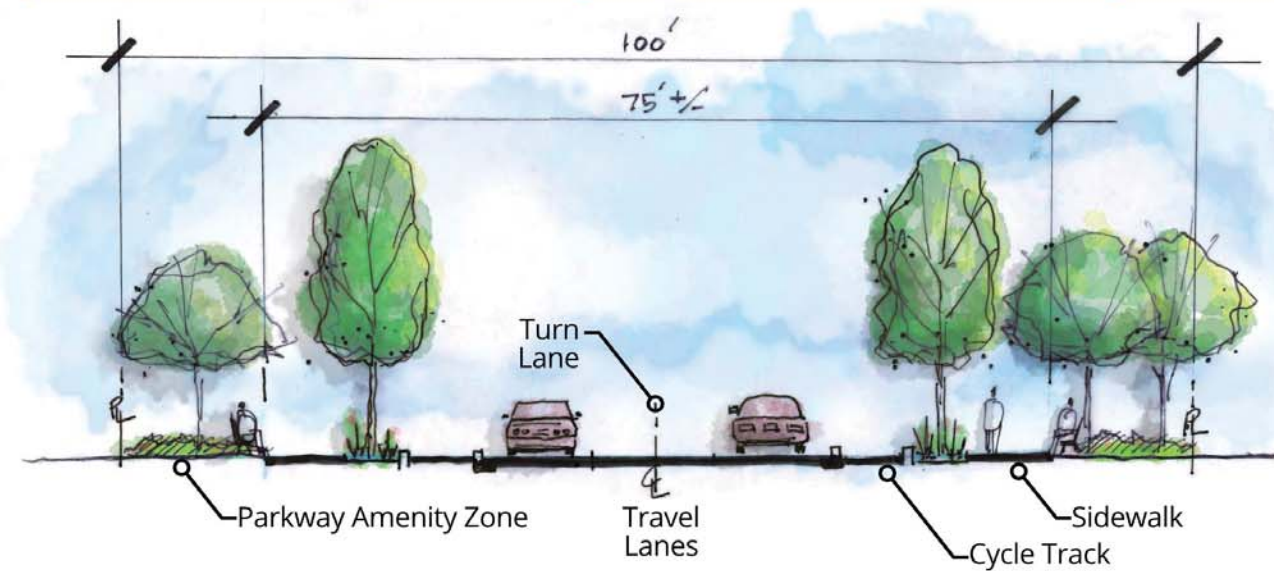
Concept Sketch - 'Project Completion'



Concept Sketch - '10 Year View'



Conceptual Section B - Cycle Track

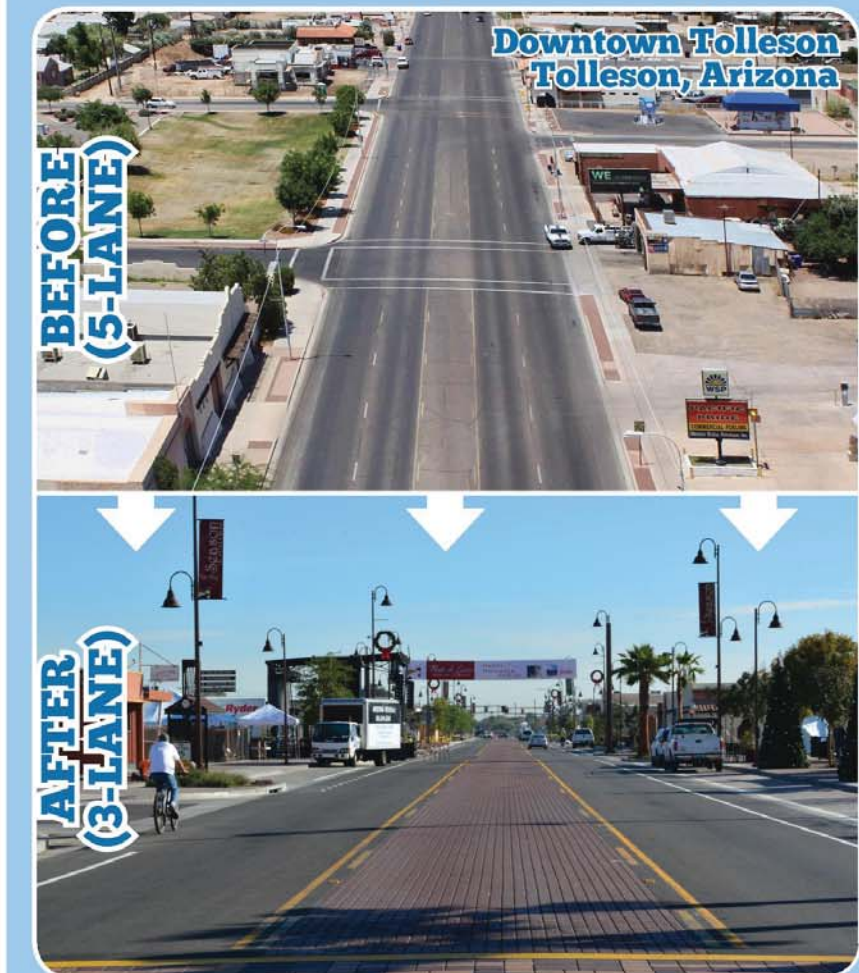


- Functions within existing 75' roadway/sidewalk zone without disturbing adjacent property parking layouts.
- A cycle track bike lane physically separates cyclists from vehicular and pedestrian traffic by using a concrete curb and planting zone buffer, respectively.
- The parkway amenity zone can harvest stormwater runoff while providing additional space for community activities where feasible.

Existing Conditions

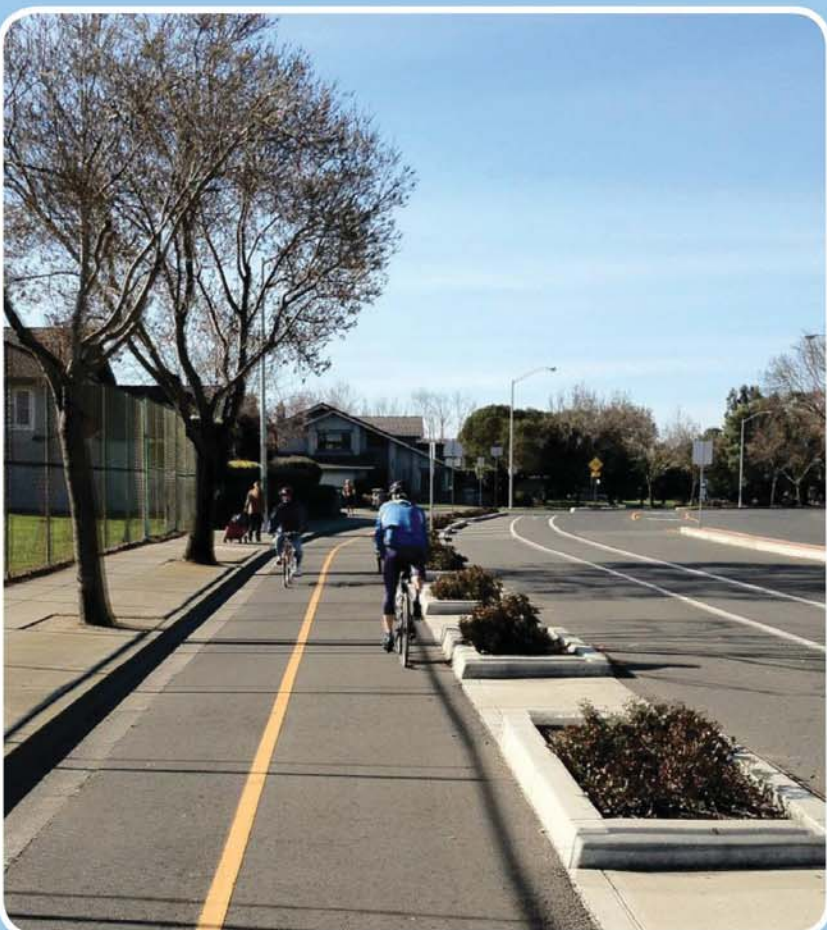


Road Right-sizing



Reducing a five-lane roadway to a three-lane roadway could provide space on Fry Boulevard for multiple amenities.

Cycle Track



Cycle tracks are protected bike lanes that separate bicyclists from vehicles and pedestrians. Barriers vary from concrete curbs, landscape areas, raised medians, reflective highway markers to simple painted warning lines.

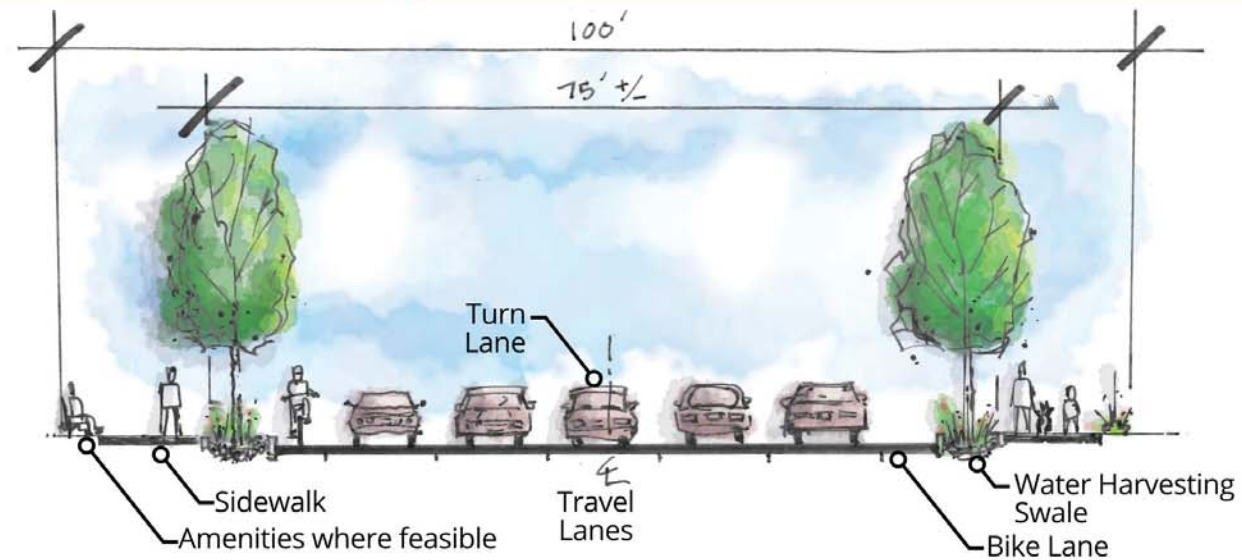
Concept Sketch - 'Project Completion'



Concept Sketch - '10 Year View'



Conceptual Section C - Five Lane Parkway

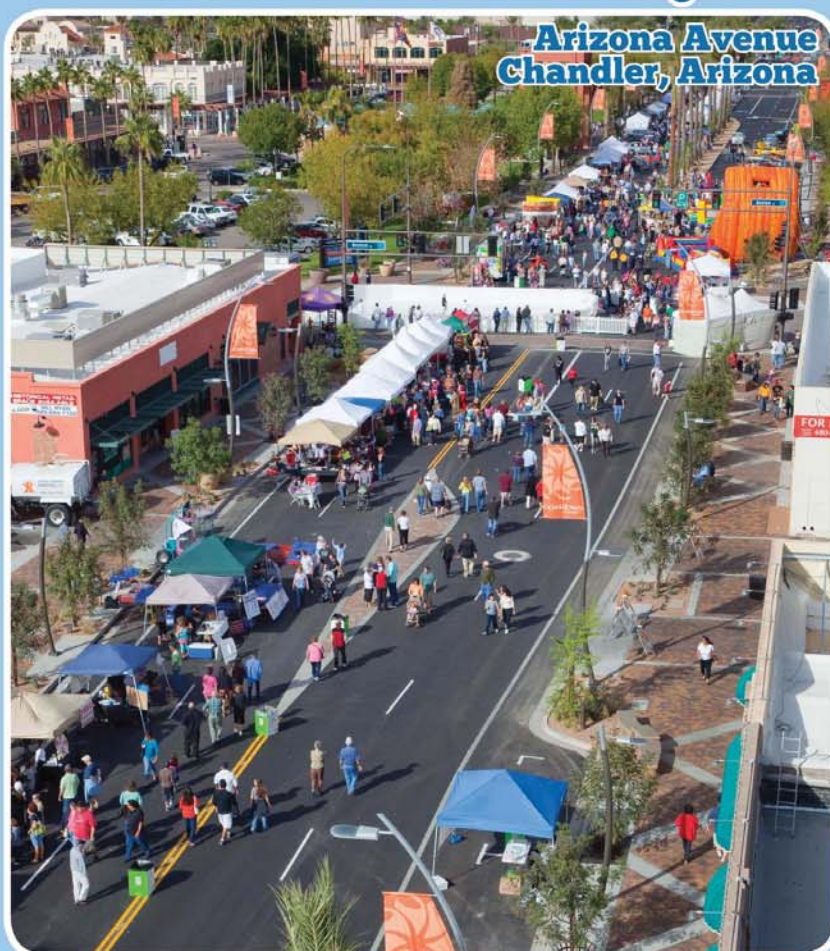


- A five lane alignment utilizes the entirety of the Fry Boulevard's 100' right-of-way.
- Water harvesting swales are an efficient, flexible infrastructure improvement that reduces water runoff volume and velocity during heavy storm events.

Existing Conditions



Five Lane Roadway



Fry Boulevard currently supports a five lane roadway alignment with 13' wide travel lanes and 5' sidewalks. Improvements would involve the reduction of lanes and extension of pedestrian amenities to the full city right-of-way of 100'.

Water Harvesting Swale



Water harvesting swales implemented within the city right-of-way efficiently manage roadway flooding during severe storm events. Properly designed, swales and other stormwater management techniques reduce the volume of stormwater from all travel lanes and relieve burdens on drainage infrastructure -- saving money on future maintenance and upkeep.

Concept Sketch - 'Project Completion'



Concept Sketch - '10 Year View'

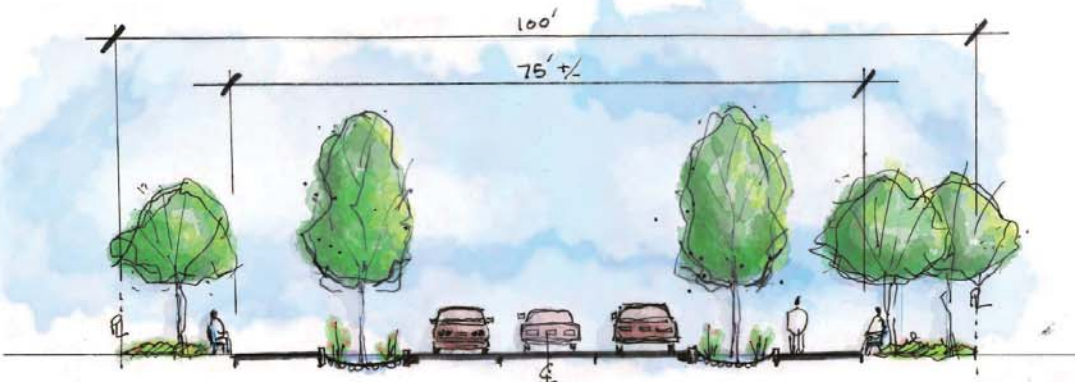




Concept A

Parkway Amenity

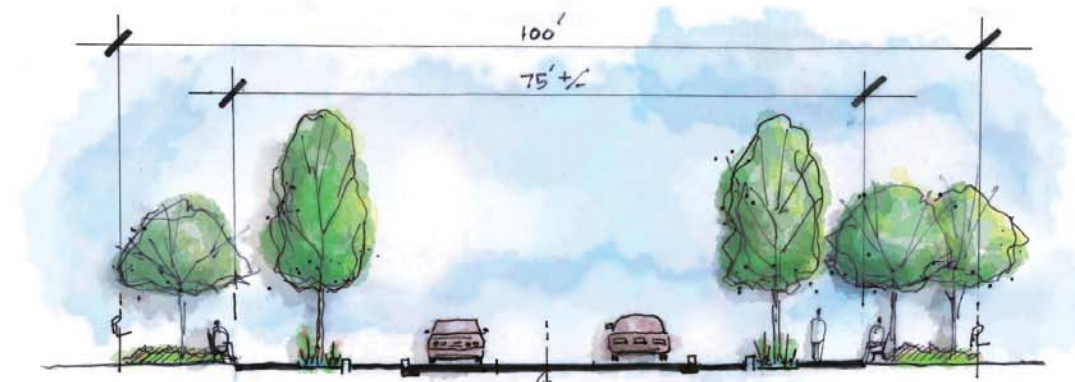
- Functions within existing 75' sidewalk zone without disturbing adjacent property parking layouts.
- 10' Multi-use path supports pedestrian and cyclist activities.
- Includes 10' water harvesting zones that act as planting buffers between multi-use path and vehicular traffic.
- The parkway amenity zone can harvest stormwater runoff while providing additional space for civic activities where feasible.



Concept B

Cycle Track Parkway

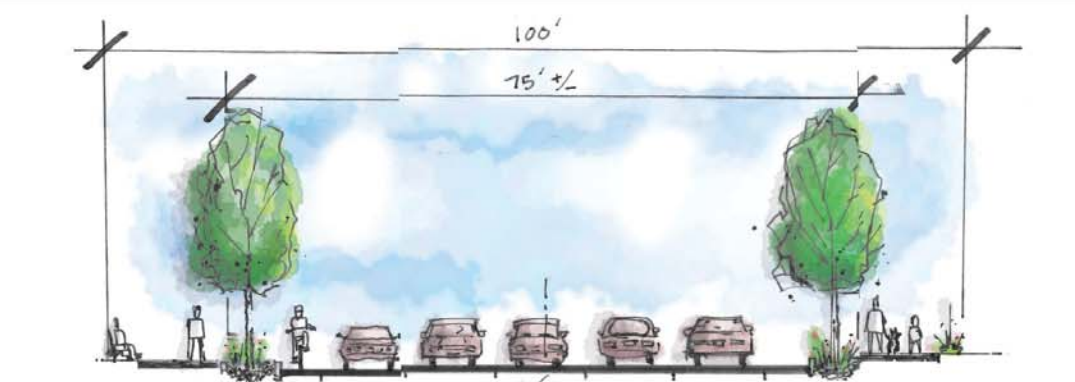
- Functions within existing 75' sidewalk zone without disturbing adjacent property parking layouts.
- Cycle track bike lane physically separates cyclists from vehicular and pedestrian traffic by using a concrete curb and planting zone buffer, respectively.
- The parkway amenity zone can harvest stormwater runoff while providing additional space for civic activities where feasible.



Concept C

Five Lane Parkway

- Conforms to existing five lane roadway layout by reducing lanes to 10.5'.
- This concept must utilized the full 100' R.O.W. on Fry Boulevard, disturbing adjacent property parking layouts.
- Includes 6.5' water harvesting zones that act as planting buffers between multi-use path and vehicular traffic.



Rain Garden



Natural Inspiration



Street Lighting / Wayfinding



Complete Streets



Hardscape Materials



Planting Palette

Street Trees



Accent Trees



Accents



Shrubs



